July 9, 2004

VIA CERTIFIED MAIL

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Re: JUNE 2004 MONTHLY REPORT
RI/FS & REMOVAL ACTION
NEASE CHEMICAL SITE
SALEM, OHIO

In accordance with Paragraph X E of the Administrative Order by Consent regarding a Remedial Investigation/Feasibility Study (RI/FS) of the Nease Chemical Site in Salem, Ohio, attached is a copy of the June 2004 RI/FS Progress Report.

Additionally, in accordance with Paragraph 14 of the Administrative Order by Consent, signed November 17, 1993, attached is a copy of the June 2004 Removal Action Progress Report.

Please contact us if you have any questions regarding activities discussed in these reports.

Sincerely,

Rainer Domalski

Dr. Rainer F. Domalski
Manager Remediation Projects

Enclosure
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NEASE CHEMICAL SITE, SALEM, OHIO
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
MONTHLY PROGRESS REPORT
JUNE 2004

1.0 INTRODUCTION

This progress report has been prepared in accordance with Paragraph XE of the Administrative Order of Consent regarding a Remedial Investigation/Feasibility Study of the Nease Chemical Site in Salem, Ohio. The report summarizes the major RI/FS actions during the month along with investigation results and any problems encountered in the project. Activities planned for next month are also presented.

2.0 SUMMARY OF ACTIVITIES PERFORMED

2.1 Project Activity Summary

The activities that were initiated and/or completed during the month are described. All activities were performed in accordance with the detailed protocol provided in the approved Work Plan.

2.2 Fieldwork

No fieldwork occurred during this month.

2.3 Reports

2.3.1 Remedial Investigation - Endangerment Assessment (EA)

Based on 2002 comments from the agencies, a revised Endangerment Assessment was submitted in April (Chapter I through VIII; Health) and June 2003 (Chapter IX and X; Ecological). It is currently under agencies' final review. On February 9, 2004, OEPA submitted its comments regarding the ecological assessment. USEPA Region V submitted its comments in March 16, 2004. ROC submitted the draft final EA on April 26, 2004.

On March 18, 2003, the agencies and ROC had a meeting regarding the upcoming Feasibility Study (FS). The parties discussed site conceptual model, proposed operational units (OU 1- 4), remedial actions objectives and technology screening (OU-2). A follow-up meeting was held on October 15, 2003. ROC presented the results from July 2003 groundwater sampling round and its meaning for the site remediation. The parties also discussed the Remedial Action Objectives and the remedial alternatives to be evaluated in the final document. US EPA Region V submitted its comments on March 16, 2004. OEPA's comments were received on May 6, 2004. The comments were discussed in a conference call; a response incl. a time schedule for the preparation of a draft FS was summarized in letter dated May 26, 2004. The draft FS (OU-2) needs to be submitted by August 26, 2004.

2.4 Meetings

No meeting was held during this month.

3.0 VARIATIONS FROM THE APPROVED RI/FS WORK PLAN

No variations from the approved Work Plans occurred during the month.

4.0 RESULTS OF SAMPLING, TESTS AND ANALYSES

No sampling was conducted during this month.

5.0 PROJECT SCHEDULE

The attached updated Work Plan schedule identifies completion and target dates for project activities. Those scheduled to occur over the next several months include:

- Prepare Feasibility Study (OU-2; groundwater and soil)

6.0 DIFFICULTIES ENCOUNTERED AND ACTION TAKEN TO RESOLVE PROBLEMS

No significant difficulties were encountered.

7.0 PERSONNEL CHANGES

No personnel changes occurred during month.

8.0 ANTICIPATED PROJECT ACTIVITIES FOR JULY 2004

- Monthly Progress Report June 2004
- Prepare Feasibility Study (OU-2)

Table 1
Nease Chemical Site, Salem, Ohio
RI/FS Schedule

Date	Task/Activity/Deliverable/Milestone
February 22, 1988	Effective Date of RI/FS Administrative Order of Consent
April 5, 1991	Partial Salem RI submitted to Agencies
July 6, 1993	Salem RI submitted to Agencies
July 29-30, 1993	Source sampling event, ROC/Golder and Agencies/B&V WST
August 10, 1993	Submit monthly progress report
September 10, 1993	Submit monthly progress report
October 10, 1993	Submit monthly progress report
November 10, 1993	Submit monthly progress report
Nov./Dec., 1993	Egypt Swamp Sampling Event
December 10, 1993	Submit monthly progress report
January 10, 1994	Submit monthly progress report
February 10, 1994	Submit monthly progress report
March 10, 1994	Submit monthly progress report
March 30, 1994	Submit Supplemental Production Well Closure Plant to Agencies
April 10, 1994	Submit monthly progress report
May 10, 1994	Submit monthly progress report
June 10, 1994	Submit monthly progress report
July 10, 1994	Submit monthly progress report
August 10, 1994	Submit monthly progress report
August 18, 1994	Submit to Agencies Additional RI Report: MFLBC
August 22, 1994	Receipt of US EPA Draft Comments on 1993 Salem RI Report
September 6, 1994	Receipt of US EPA Comments on 1993 Salem RI Report
September 10, 1994	Submit monthly progress report
September 23, 1994	Receipt of USEPA Comments on Well Closure Plan
October 7, 1994	Submit Supplemental Production Well Closure Plan (Revision #1)
October 10, 1994	Submit monthly progress report
November 8, 1994	Receipt of USEPA approval of Well Closure Plan (Revision #1)
November 10, 1994	Submit monthly progress report
December 10, 1994	Submit monthly progress report
December 13-19, 1994	Production Well Closure Field Work
January 10, 1995	Submit monthly progress report
February 10, 1995	Submit monthly progress report
February 27, 1995	Receipt of USEPA Comments to Additional Remedial Investigation Report
March 10, 1995	Submit monthly progress report
March 30, 1995	Revised MFLBC Sampling Plan submitted
April 10, 1995	Submit monthly progress report
April 25, 1995	Meet to finalize MFLBC Sampling Plan
May 10, 1995	Submit monthly progress report

Date	Task/Activity/Deliverable/Milestone
June 6, 1995	Propose groundwater sampling Round 3
June 10, 1995	Submit monthly progress report
June 30, 1995	Receive agency comments to groundwater sampling Round 3 proposal
July 5, 1995	Receive agency approval of MFLBC Sampling Plan
July 6, 1995	Submit revised Round 3 groundwater sampling proposal
July 10, 1995	Submit monthly progress report
August 1, 1995	Receive Agency approval for CAL MPK analysis
August 4, 1995	Submit Rt. 14/Feeder Creek Plan to Agencies
August 10, 1995	Submit monthly progress report
September 5-15, 1995	Anticipated MFLBC phase III Sample Collection
September 10, 1995	Submit monthly progress report
September 12, 1995	Receive agency comments on Rt. 14/Feeder Creek Sampling Plan
September 18-30, 1995	Round 3 Groundwater Collection
October 6, 1995	Submit revised Rt. 14/Feeder Creek Sampling Plan
October 25, 1995	Resubmit revised Rt. 14/Feeder Creek Sampling (Verbal Comments)
October 30-November 2, 1995	Collect Rt. 14/Feeder Creek Samples
November 10, 1995	Submit monthly progress report
December 10, 1995	Submit monthly progress report
December 28, 1995	Receive Agency comments to Remedial Investigation Report
January 10, 1996	Submit monthly progress report
January 31, 1996	Submit Revised RI Report Volumes 1, 1A, 3 and 4
February 10, 1996	Submit monthly progress report
March 10, 1996	Submit monthly progress report
April 10, 1996	Submit monthly progress report
April 24, 1996	Meeting with agencies to discuss project status and submittal dates
May 10, 1996	Submit monthly progress report
May 24, 1996	Submit Appendix N
June 10, 1996	Submit monthly progress report
June 14, 1996	Submit Round 3 Groundwater Sampling Data
June 19, 1996	Revised RI Approved by EPA/OEPA
July 10, 1996	Submit monthly progress report
August 10, 1996	Submit monthly progress report
September 6, 1996	Submit monthly progress report
September 11, 1996	Meeting with Agencies to discuss Endangerment Assessment Comments
October 10, 1996	Submit monthly progress report, Submit revised Rt. 14/FC Investigation Results, Submit revised Eastern Plume/DNAPL Work Plan
November 10, 1996	Submit monthly progress report
December 10, 1996	Submit monthly progress report
December, 1996	Complete Fieldwork E. Plume/DNAPL Workplan
January 10, 1997	Submit monthly progress report
January 23, 1997	Piezometer (hydropunch) sampling conducted
February 7, 1997	Submit monthly progress report

Date	Task/Activity/Deliverable/Milestone
March 7, 1997	Submit monthly progress report
March 25, 1997	Receive agency comments on E. Plume/DNAPL Workplan
April 10, 1997	Submit monthly progress report
May 9, 1997	Submit monthly progress report
June 9, 1997	Submit monthly progress report
June 30, 1997	Receive Agency comments on Appendix N, RI
July 8, 1997	Submit monthly progress report
July 18, 1997	Submit revision package for Appendix N addressing agency comments
August 8, 1997	Submit DNAPL/Eastern Plume Report and Monthly progress report
August 20, 1997	Agency approval of Appendix N
September 10, 1997	Submit monthly progress report
October 10, 1997	Submit monthly progress report
November 10, 1997	Submit monthly progress report
December 10, 1997	Submit monthly progress report
December 18, 1997	Receive (12/19/97) agency comments to previously submitted EA chapters
December 18, 1997	Receive (12/29/97) USEPA Comments to Eastern Plume/DNAPL report
December 29, 1997	Receive (12/31/97) OEPA Comments to Eastern Plume/DNAPL report
January 8, 1998	Clarifications to agency EA comments requested by ROC letter
January 9, 1998	Submit monthly progress report
January 13, 1998	Telephone conference to obtain clarification on agency EA comments (human health)
January 22, 1998	Meeting in US EPA's Chicago offices to discuss Eastern Plume/DNAPL report comments
January 28, 1998	Telephone conference to obtain clarifications on agency EA comments
January 29, 1998	Telephone conference to obtain clarifications on agency EA comments (Ecological and revision schedule)
February 3, 1998	ROC letter regarding summary of previous EA clarification telephone calls
February 10, 1998	Submit monthly progress report
February 12, 1998	Meeting in Twinsburg, OH to discuss agency comment to EA chapters and approach for finalization of remaining chapters.
March 10, 1998	Submit monthly progress report
April 1, 1998	Receiver USEPA comments to revised Eastern Plume/DNAPL report
April 8, 1998	Submit monthly progress report
April 15, 1998	Submit Complete EA
May 7, 1998	Submit monthly progress report
June 9, 1998	Submit monthly progress report
July 10, 1998	Submit monthly progress report
August 5, 1998	Revised Eastern Plume/DNAPL report submitted
August 7, 1998	Submit monthly progress report
August 14, 1998	Receive draft agency comments on EA
August 26, 1998	Meeting in Twinsburg, Ohio to discuss EA comments
September 10, 1998	Submit monthly progress report
October 8, 1998	Meeting to discuss EA technical issues (EPA office, Chicago)
October 9, 1998	Submit monthly progress report

Date	Task/Activity/Deliverable/Milestone
November 6, 1998	Teleconference on EA comments
November 10, 1998	Submit monthly progress report
November 30, 1998	Receive additional agency comments on EA
December 10, 1998	Submit monthly progress report
December 15, 1998	Teleconference on EA comments
January 6, 1999	Teleconference on EA comments (remaining item information status)
January 8, 1999	Submit monthly progress report
January 22, 1999	Submit EA Appendices
February 3, 1999	Agency MFLBC Sampling Letter received
February 9, 1999	Receive partial agency comments to EA/Appendices
February 10, 1999	Submit monthly progress report
February 23, 1999	ROC responds to MFLBC Sampling proposal
March 9, 1999	Submit monthly progress report
March 16, 1999	Receive additional agency comments to EA/Appendices, more anticipated
April 8, 1999	Receive final agency comments to EA/Appendicies
April 9, 1999	Submit monthly progress report
May 10, 1999	Submit monthly progress report
May 17, 1999	Agency response letter to ROC MFLBC sampling proposal received
June 7, 1999	Conference call to resolve details on MFLBC sampling program and locations
June 9, 1999	Submit monthly progress report
June 18, 1999	Submit revised EA
July 9, 1999	Submit monthly progress report
July 12-21, 1999	Conduct additional MFLBC field sampling work
July 28, 1999	ROC proposal for Residential well sampling program via a conference call
August 8, 1999	Submit monthly progress report
September 1, 1999	Agency approval of residential well sampling program via a conference call
September 10, 1999	Submit monthly progress report
October 8, 1999	Submit monthly progress report
November 8, 1999	Submit monthly progress report
December 9, 1999	Submit monthly progress report
January 10, 2000	Submit monthly progress report
January 11, 2000	Conduct Residential Well Sampling Program
February 10, 2000	Submit monthly progress report
March 8, 2000	Submit monthly progress report
March 31, 2000	Submit MFLBC Date Summary Report
April 4, 2000	Submit monthly progress report
May 10, 2000	Submit monthly progress report
June 7, 2000	Submit Residential Well Sampling Results
June 8, 2000	Submit monthly progress report
July 7, 2000	Submit monthly progress report
July 31, 2000	Received agency comment letter regarding draft Endangerment

Date	Task/Activity/Deliverable/Milestone
	Assessment
August 8, 2000	Submit monthly progress report
September 8, 2000	Submit monthly progress report
October 4, 20000	Submit monthly progress report
October 11, 2000	Agencies/ROC meeting regarding agency's comments to draft Endangerment Assessment
November 3, 2000	Submit monthly progress report
November 14, 2000	Submit parts of the revised Endangerment Assessment (Chapter 1 – 4, 9)
December 8, 2000	Submit monthly progress report
December 12, 2000	Submit parts of the revised Endangerment Assessment (Chapter 10)
January 4, 2001	Submit monthly progress report
February 6, 2001	Submit monthly progress report
March 8, 2001	Submit monthly progress report
April 9, 2001	Submit monthly progress report
April 11, 2001	Received agencies' comments regarding Appendix I
May 8, 2001	Submit monthly progress report
May 18, 2001	Received agencies' comments regarding Appendix I
June 6, 2001	Submit monthly progress report
July 6, 2001	Submit monthly progress report
August 7, 2001	Submit monthly progress report
August 20, 2001	Received agencies' comments regarding indoor air
September 7, 2001	Received agencies' comments regarding dermal exposure
September 10, 2001	Submit monthly progress report
September 18, 2001	Initial response to agencies' September 7, 2001 letter
October 5, 2001	Submit Monthly progress report
October 19, 2001	Received agencies' comment letter regarding EA issues
November 2, 2001	Response to agencies' comments October 19, 2001
November 7, 2001	Submit monthly progress report
December 7, 2001	Submit monthly progress report
December 28, 2001	Submit draft final Endangerment Assessment (Human Health)
January 9, 2001	Submit monthly progress report
January 25, 2002	Submit revised EA Chapters VI and VIII
February 8, 2002	Submit monthly progress report
March 5, 2002	Submit monthly progress report
April 5, 2002	Submit monthly progress report
May 8, 2002	Submit monthly progress report
June 5, 2002	Submit monthly progress report
July 8, 2002	Submit monthly progress report
August 9, 2002	Submit monthly progress report
August 26, 2002	EPA submit comments regarding ecological part of EA
September 10, 2002	Submit monthly progress report
October 10, 2002	Submit monthly progress report
October 30, 2002	Submit Draft Endangerment Assessment (Human Health Part)
November 6, 2002	Submit monthly progress report
December 3, 2002	Meeting with the agencies regarding the ecological part of the EA
December 10, 2002	Submit monthly progress report
December 30, 2002	Agency comment letter regarding EA
January 9, 2003	Submit progress report
February 5, 2003	Submit monthly progress report
March 18, 2003	Meeting between agencies and ROC regarding FS
March 19, 2003	Submit monthly progress report

Date	Task/Activity/Deliverable/Milestone
April 7, 2003	Submit monthly progress report
April 25, 2003	Submit revised EA Chapter I – VIII (Human Health)
May 7, 2003	Submit monthly progress report
June 10, 2003	Submit monthly progress report
June 23, 2003	Submit revised EA Chapter IX and X (Ecology)
July 8, 2003	Submit monthly progress report
July 21, 2003	Start groundwater sampling (36 MW, sandbank)
August 8, 2003	Submit monthly progress report
September 5, 2003	Submit monthly progress report
October 8, 2003	Submit monthly progress report
October 15, 2003	Meeting between agencies and ROC (FS groundwater and soil)
October 10, 2003	Submit monthly progress report
November 10, 2003	Submit monthly progress report
December 8, 2003	Submit monthly progress report
January 9, 2004	Submit monthly progress report
February 6, 2004	Submit monthly progress report
February 9, 2004	OEPA comments regarding ecological assessment
March 15, 2004	Submit monthly progress report
March 16, 2004	US EPA Region V comments regarding EA and FS (OU-2)
April 7, 2004	Submit monthly progress report
April 26, 2004	Submit draft final EA
May 6, 2004	OEPA comments regarding FS (OU-2)
May 7, 2004	Submit monthly progress report
June 7, 2004	Submit monthly progress report
July 9, 2004	Submit monthly progress report

NEASE CHEMICAL SITE, SALEM, OHIO
REMOVAL ACTION
MONTHLY PROGRESS REPORT
JUNE 2004

1.0 INTRODUCTION

This progress report has been prepared in accordance with Paragraph 14 of the "Order" section of the Administrative Order by Consent (AOC) Docket No. V-W-94-C-212, effective November 17, 1993, regarding a Removal Action at the Nease Chemical Site in Salem, Ohio. The report summarizes the major activities during the month along with investigation results and any problems encountered on the project. Activities planned for next month are also presented.

2.0 SUMMARY OF ACTIVITIES PERFORMED

2.1 Project Activity

The activities that were initiated and/or completed during this month are described below. Activities were performed in accordance with the Removal Action AOC.

OEPA, Northeast District Office conducted a compliance evaluation inspection of the Salem Site on April 30 and May 26, 2004. A follow-up letter from OEPA was submitted on June 28, 2004. ROC is currently working on required corrective actions and will response to OEPA's letter by July 30, 2004.

2.2 Work Plan Preparation/Reports

No work plans/reports were submitted this period.

2.3 Fieldwork

2.3.1 Site Inspections

The results of the monthly site inspection carried out at the site in June 30, 2004 are shown in Attachment 1.

2.3.2 Monthly Water Level Measurements

The next water level measurements are planned for August 2004.

2.3.3 Treatment Plant Operation

The treatment plant operated mostly normal throughout the month (see Chapter 6).

2.4.1.1 Meetings

No meeting occurred during this month.

3.0 VARIATIONS FROM THE APPROVED REMOVAL ACTION WORK PLAN

There were no variations from the approved Removal Action Work Plan for the month.

4.0 RESULTS OF INSPECTIONS, ENVIRONMENTAL SAMPLING, TESTS AND ANALYSES

Water monitoring samples were collected from the treatment plant during May/june 2004. Attachment 2 and 3 include results from water and air samples collected on April 20, 2004 and May 4, 2004 (Lab: Exygen Research). The mid-June sampling results were not available at the time reporting. It will be included in the next monthly report. Also attached is the quarterly results of two acute toxicity evaluations conducted from May 18 through May 22, 2004 by American Aquatic Testing Inc. (Attachment 4).

5.0 PROJECT SCHEDULE

The updated Work Plan schedule identifies completion and target dates for project activities.

6.0 DIFFICULTIES ENCOUNTERED AND ACTION TAKEN TO RESOLVE PROBLEMS

On June 14, 2004, ROC informed OEPA that the influent tank of the onsite groundwater system had overflown. The water level switch in the tank, which normally shuts down the pump of the leachate collection system at a certain water level reached in the tank, was not functioning because of iron precipitation. The water recovered from the collection system discharged to the floor inside the treatment plant building. Some portion of this water also discharged to the ground outside the building. There was no indication that water reached any drainage ditch. The discharge area is inside the capture zone of the groundwater collection system. Infiltrated water is expected to be recovered.

ROC promptly informed Joe Trocchio, OEPA site manager from the NE District Office and the Spill Hotline. A written notification was submitted to OEPA on June 15, 2004. Water on the floor was vacuumed up.

The switch was immediately cleaned and is properly functioning since. In the short-term, the treatment will only be operated when personnel is onsite and can physically control the system. Golder, ROC's technical consultant, is currently reviewing different improvement options (i.e., additional high level alarm if high level switch does not shut down pump; containment around the influent tank, automatic startup of transfer pump, more frequent inspection of the level switches in the tank system). ROC will soon submit a proposal to the agencies for review and approval.

7.0 PERSONNEL CHANGES

No changes occurred during this month.

8.0 TYPES AND QUANTITIES OF REMOVED MATERIALS

For the period from May 1 through May 31, 2004 the following material was removed:

- 15,000 gallons of leachate and/or backwash water were disposed off-site at a licensed treatment facility.
- Approximately 239,700 gallons were pumped from Leachate Collection System 1 (LCS-1) (total for LCS-1 =16,490,396 gal).
- Approximately 13,494 gallons were pumped from Leachate Collection System 2 (LCS-2) (total for LCS-2 = 1,133,405 gal).
- 5,493 gallons of water were pumped from Pond 1 (total for the pond = 886,600 gallons).

- Approximately 23 pounds of organic compounds were removed during pumping (estimate based on average VOC/SVOC concentrations for each source).

9.0 ANTICIPATED PROJECT ACTIVITIES FOR JULY 2004

Removal Action activities scheduled for the upcoming month include on-going implementation of the approved Removal Action Work Plan involving:

- Collection of groundwater from the existing collection systems LCS-1, LCS-2 and Pond 1.
- Monthly Progress Report

Table 1
Nease Chemical Site, Salem, Ohio
Removal Action Schedule

Date	Task/Activity/Deliverable/Milestone
November 17, 1993	Removal AOC Effective Date
November 17, 1993	Commence Preparation of Removal Action Work Plan
November 23, 1993	Submit Treatment Plant Performance Evaluation Work Plan (Rev. #1)
November 28, 1993	USEPA Conditional Approval of TPPEWP
December 1, 1993	Commence Treatment Plant Performance Evaluation
December 9, 1993	Complete Treatment Plant Performance Evaluation
December 10, 1993	Submit monthly progress report
December 17, 1993	Submit Removal Action Work Plan (Rev #0) to USEPA
January 3, 1994	USEPA Approval of TPPEWP (Rev #1)
January 10, 1994	Submit monthly progress report
January 15, 1994	Complete Treatment Plant Data Analysis and Evaluation
January 17, 1994	Notify EPA of inability of Treatment Plant to meet proposed discharge criteria. Commence preparation of Treatment Plant Modifications Work Plan (TPMWP)
January 24, 1994	USEPA disapproval of Removal Action Work Plan (Rev. #0) and associated comments
February 4, 1994	Submit Revised Removal Action Work Plan (Rev #1) and Response to Agency comments
February 10, 1994	Submit monthly progress report
February 11, 1994	Submit Treatment Plant Performance Evaluation Report (TPPER)
March 2, 1994	Submit Treatment Plant Modifications Work Plan (TPMWP, Rev. #0)
March 10, 1994	Submit monthly progress report
April 10, 1994	Submit monthly progress report
April 13, 1994	Submit Revised Removal Action Work Plan (Rev #2) and Response to Agency comments
April 20, 1994	Submit Revised TPMWP (Rev #1) and Response to Agency comments
May 10, 1994	Submit monthly progress report
May 13, 1994	Submit Updates (Rev #3) to Removal Action Work Plan (Rev #2) and Response to Agency comments
May 25, 1994	USEPA approval of Revised RA Work Plan (Rev #2). Commence work on Work Plan implementation
May 25, 1994	Commence Preparation of Removal Action WP Addendum
June 1, 1994	Receipt of USEPA approval of Revised RA Work Plan (Rev #3)
June 10, 1994	Submit monthly progress report
June 24, 1994	Submit TPMWP (Rev #2)
July 10, 1994	Submit monthly progress report
July 26, 1994	Submit Treatment Plant Modifications Design Technical Memorandum (TPMDTM, Rev #0)
July 28, 1994	Receipt of USEPA approval of TPMWP (Rev #2 with revised Table 4)
August 10, 1994	Submit monthly progress report
August 30, 1994	Submit Removal Action Work Plan Addendum (RAWPA)
September 10, 1994	Submit monthly progress report

Date	Task/Activity/Deliverable/Milestone
September 23, 1994	Receipt of USEPA Comments or TPMDTM
October 3, 1994	Submit TPMDTM (Rev #1)
October 4, 1994	Submit TPMDTM (Rev #1)
October 10, 1994	Submit monthly progress report
November 9, 1994	Submit TPMDM (Rev #2)
November 10, 1994	Submit monthly progress report
December 1, 1994	Receipt of USEPA approval of TPMDTM (Rev #2)
December 10, 1994	Submit monthly progress report
December 12-19, 1994	RAWPA Extraction Well and Piezometer Installation
January 10, 1995	Submit monthly progress report
January/February/ March, 1995	Construction of TPMWP/TPMDTM measures
February 10, 1995	Submit monthly progress report
March 10, 1995	Submit monthly progress report
March 13-16, 1995	Performance of Field Pumping Tests (E4 and S7)
April 10, 1995	Submit monthly progress report
April 24, 1995	Submit status report on RAWPA, Task 5
May 4, 1995	Start on-site treatment plant
May 10, 1995	Submit monthly progress report
June 10, 1995	Submit monthly progress report
July 10, 1995	Submit monthly progress report
July 21, 1995	Submit treatment plant 1st month operation summary report
July 26, 1995	Submit Cone penetrometer testing report and additional investigation plan
August 10, 1995	Submit monthly progress report
September 10, 1995	Submit monthly progress report
October 10, 1995	Submit monthly progress report
November 10, 1995	Submit monthly progress report
December 10, 1995	Submit monthly progress report
January 8-12, 1996	Conduct 2nd Round of cone penetrometer testing on site
January 10, 1996	Submit monthly progress report
February 10, 1996	Submit monthly progress report
March 10, 1996	Submit monthly progress report
April 10, 1996	Submit monthly progress report
April 18, 1996	Discontinue Outfall Discharge
April 24, 1996	Agency Meeting – Discuss CPT results and future action plan
May 10, 1996	Submit monthly progress report
May 23, 1996	Submit 1996 IRM Seep Investigation and Fabric Barrier Work Plan
June 10, 1996	Submit monthly progress report
July 8-12, 1996	Install Piezometers and modify fabric barriers
July 10, 1996	Submit monthly progress report
August 6, 1996	Submit monthly progress report
September 10, 1996	Submit monthly progress report
October 10, 1996	Submit monthly progress report

Date	Task/Activity/Deliverable/Milestone
November 10, 1996	Submit monthly progress report
December 10, 1996	Submit monthly progress report
January 10, 1997	Submit monthly progress report
February 10, 1997	Submit monthly progress report
March 10, 1997	Submit monthly progress report
April 10, 1997	Submit monthly progress report
May 9, 1997	Submit monthly progress report
May 13, 1997	Sample seep piezometers
June 9, 1997	Submit monthly progress report
July 8, 1997	Submit monthly progress report
August 8, 1997	Submit monthly progress report
September 10, 1997	Submit monthly progress report
October 10, 1997	Submit monthly progress report
November 10, 1997	Submit monthly progress report
December 10, 1997	Submit monthly progress report
January 9, 1998	Submit monthly progress report
February 10, 1998	Submit monthly progress report
March 10, 1998	Submit monthly progress report
April 8, 1998	Submit monthly progress report
May 7, 1998	Submit monthly progress report
June 9, 1998	Submit monthly progress report
June 30, 1998	Sample Seep Sheen
July 10, 1998	Submit monthly progress report
August 7, 1998	Submit monthly progress report
August 19, 1998	Install 1 new fabric barrier and remover 1 old one
September 10, 1998	Submit monthly progress report
October 9, 1998	Submit monthly progress report
November 10, 1998	Submit monthly progress report
December 10, 1998	Submit monthly progress report
January 8, 1999	Submit monthly progress report
February 10, 1999	Submit monthly progress report
March 9, 1999	Submit monthly progress report
April 9, 1999	Submit monthly progress report
May 10, 1999	Submit monthly progress report
June 9, 1999	Submit monthly progress report
July 9, 1999	Submit monthly progress report
August 9, 1999	Submit monthly progress report
September 10, 1999	Submit monthly progress report
October 8, 1999	Submit monthly progress report
November 8, 1999	Submit monthly progress report
December 9, 1999	Submit monthly progress report
January 10, 2000	Submit monthly progress report
February 10, 2000	Submit monthly progress report

Date	Task/Activity/Deliverable/Milestone
March 8, 2000	Submit monthly progress report
April 4, 2000	Submit monthly progress report
May 10, 2000	Submit monthly progress report
June 8, 2000	Submit monthly progress report
July 7, 2000	Submit monthly progress report
August 8, 2000	Submit monthly progress report
September 8, 2000	Submit monthly progress report
October 4, 2000	Submit monthly progress report
November 3, 2000	Submit monthly progress report
December 8, 2000	Submit monthly progress report
January 4, 2001	Submit monthly progress report
February 6, 2001	Submit monthly progress report
March 8,2001	Submit monthly progress report
April 9, 2001	Submit monthly progress report
May 8, 2001	Submit monthly progress report
June 6, 2001	Submit monthly progress report
July 6, 2001	Submit monthly progress report
August 7, 2001	Submit monthly progress report
September 10, 2001	Submit monthly progress report
October 5, 2001	Submit monthly progress report
November 7, 2001	Submit monthly progress report
December 7, 2001	Submit monthly progress report
January 9, 2002	Submit monthly progress report
February 8, 2002	Submit monthly progress report
March 5, 2002	Submit monthly progress report
April 5, 2002	Submit monthly progress report
May 8, 2002	Submit monthly progress report
June 5, 2002	Submit monthly progress report
July 8, 2002	Submit monthly progress report
August 9, 2002	Submit monthly progress report
September 10, 2002	Submit monthly progress report
October 10, 2002	Submit monthly progress report
November 6, 2002	Submit monthly progress report
December 10, 2002	Submit monthly progress report
January 9, 2003	Submit monthly progress report
February 7, 2003	Submit monthly progress report
March 19, 2003	Submit monthly progress report
April 7, 2003	Submit monthly progress report
May 7, 2003	Submit monthly progress report
June 10, 2003	Submit monthly progress report
July 8, 2003	Submit monthly progress report
August 8, 2003	Submit monthly progress report
September 5, 2003	Submit monthly progress report
October 8, 2003	Submit monthly progress report
November 10, 2003	Submit monthly progress report
December 8, 2003	Submit monthly progress report
January 9, 2004	Submit monthly progress report
February 6, 2004	Submit monthly progress report
March 15, 2004	Submit monthly progress report
April 7, 2004	Submit monthly progress report
May 7, 2004	Submit monthly progress report
June 7, 2004	Submit monthly progress report

Date	Task/Activity/Deliverable/Milestone
July 9, 2004	Submit monthly progress report

ATTACHMENT 1
RESULTS OF MONTHLY SITE INSPECTION
NEASE CHEMICAL SITE, SALEM, OHIO
JUNE 2004

SITE INSPECTION FORM
RUETGERS-NEASE CORPORATION
Nease Site, Salem, Ohio

Date of Inspection: 6-30-04

Entry Time: 8:30 Exit Time: 12:00

Weather: SUNNY 80°

Inspector's Name: DENNIS L. LANE

Inspector's Company: Howells and Baird, Inc.

INSPECTION RESULTS

SPECIFIC OBSERVATIONS: Structures

(Responses: S = Satisfactory U = Unsatisfactory Yes/No Levels Measured in Feet, N/A = Not Applicable)

	Pump	Quick Connect	Water Level	Berm Erosion	Visible Leakage
Leachate Collection System 1 (LCS-1)	S	S	10.16	N/A	No
Leachate Collection System 2 (LCS-2)	S	S	6.94	N/A	No
Pond 1 Pumphouse	S	S	8.62	N/A	No
Pond 1 Berm	N/A	N/A	N/A	No	No
Pond 2 Embankment	N/A	N/A	N/A	No	No
Exclusion Area A Embankment	N/A	N/A	N/A	No	No
Storage Tank	N/A	S	4.96	N/A	No
Other (specify)					

SPECIFIC OBSERVATIONS: Sediment Barriers

Condition of Sediment Barriers

Barrier ID	Fabric Intact?	By Passing Evident?	Is Maintenance Necessary?
Sediment Control Structure 1	YES	No	No
Sediment Control Structure 2	YES	No	No
Fabric Barrier 2	YES	No	No
Fabric Barrier 3	YES	No	No
Fabric Barrier 4	YES	No	No
Fabric Barrier 5	YES	No	No
Fabric Barrier 8	YES	No	No
Fabric Barrier 9	YES	No	No
Fabric Barrier 10	YES	No	No
Rock Barrier 1	YES	No	No
Rock Barrier 2	YES	No	No
Pond 7 - North	YES	No	No
Pond 7 - South	YES	No	No

SPECIFIC OBSERVATIONS: Seeps (if present, use more forms, as necessary)

Seep ID (yr-month-#)	Located on Map	Areal Extent (ft 2)	Magnitude (flow?, ponding?)
94-7-1	YES	20	NON-FLOWING SEEP
96-8-2	YES	20	NON-FLOWING SEEP

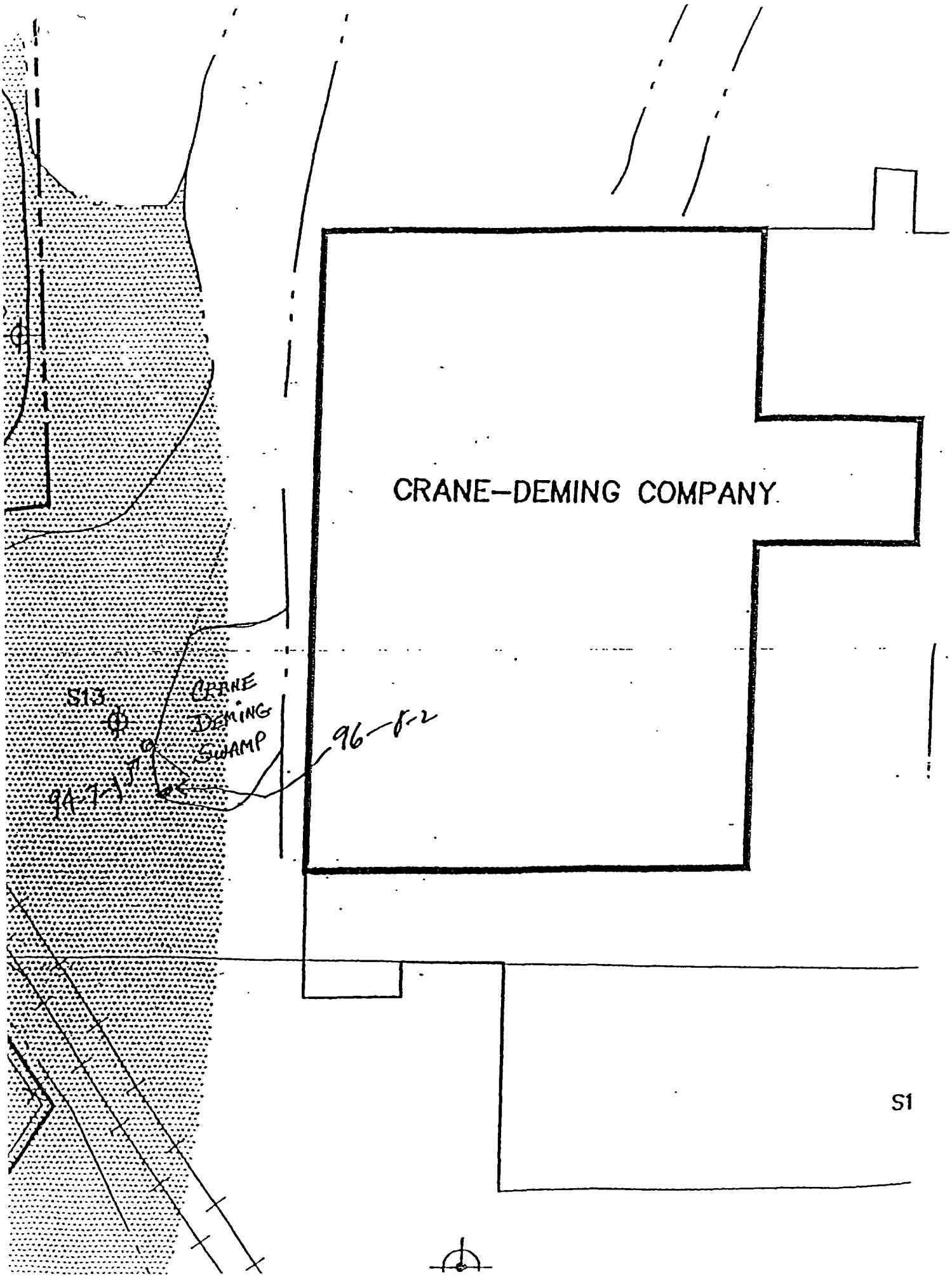
Note Seep ID # equal the "nth' observed seep during the yr-month in question

ADDITIONAL OBSERVATION OR REMARKS:

Inspector's Name: DENNIS L. LANE

Inspector's Signature: Dennis L. Lane

Date: 6-30-04


CRANE–DEMING COMPANY
S13
CRANE DEMING SWAMP
96-B-2
94-1-1
S1

ATTACHMENT 2

WATER/AIR SAMPLING RESULTS – MAY 18, 2004
NEASE CHEMICAL SITE, SALEM, OHIO

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Analytical Report

RUTGERS ORGANICS CORPORATION
201 STRUBLE ROAD
STATE COLLEGE , PA 16801
Account Number: 155

Contact: RAINER DOMALSKI

Date Received. 19-MAY-04
Date Reported 27-JUN-04

Invoice Number· 33446

Date Collected· 18-MAY-04

Client ID: INFLUENT 5-18-04

Lab ID. L35741-1

PARAMETER	UNITS	RESULT	LIMIT OF QUANTITATION	TEST METHOD	TEST DATE	ANALYST
PESTICIDE ANALYSIS						
KEPONE	ug/L	U 042	.042	SOP 6.2	24-JUN-04	CS
PHOTOMIREX	ug/L	U 006	006	SOP 6.2	24-JUN-04	CS
MIREX	ug/L	.13	002	SOP 6 2	24-JUN-04	CS
PH	PH UNITS	6 46	0	EPA 150.1	01-JUN-04	JPB
TOTAL DISSOLVED SOLIDS	mg/L	589	10	EPA 160 1	24-MAY-04	STL
TOTAL SUSPENDED SOLIDS	mg/L	17 2	4	EPA 160 2	24-MAY-04	STL

Comments. <none>

Submitted by
Exygen Research
Reviewed and Approved by

Charles Simons
Laboratory Manager

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Analytical Report

RUTGERS ORGANICS CORPORATION
201 STRUBLE ROAD
STATE COLLEGE , PA 16801
Account Number· 155

Contact: RAINER DOMALSKI

Date Received 19-MAY-04
Date Reported 27-JUN-04

Invoice Number· 33446

Date Collected: 18-MAY-04

Client ID· LGAC 2-3-5-18-04

Lab ID. L35741-2

PARAMETER	UNITS	RESULT	LIMIT OF QUANTITATION	TEST METHOD	TEST DATE	ANALYST
PESTICIDE ANALYSIS						
KEPONE	ug/L	U 042	.042	SOP 6 2	24-JUN-04	CS
PHOTOMIREX	ug/L	U 006	.006	SOP 6 2	24-JUN-04	CS
MIREX	ug/L	U .002	.002	SOP 6 2	24-JUN-04	CS
PH	PH UNITS	6.97	0	EPA 150.1	01-JUN-04	JPB
TOTAL DISSOLVED SOLIDS	mg/L	544	10	EPA 160.1	24-MAY-04	STL
TOTAL SUSPENDED SOLIDS	mg/L	< 4	4	EPA 160.2	24-MAY-04	STL
VOLATILE ANALYSIS						
VINYL CHLORIDE	ug/L	< 20	20	EPA 8260B	21-MAY-04	JEG
DICHLOROMETHANE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
1,1-DICHLOROETHENE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
CIS-1,2-DICHLOROETHENE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
TRANS-1,2-DICHLOROETHENE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
CHLOROFORM	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
1,2-DICHLOROETHANE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
1,1,1-TRICHLOROETHANE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
1,1,2,2-TETRACHLOROETHANE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
1,2-DICHLOROPROPANE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
TRICHLOROETHENE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
BENZENE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
TETRACHLOROETHENE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
TOLUENE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
CHLOROBENZENE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
ETHYLBENZENE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
M,P-XYLENE	ug/L	< 10	10	EPA 8260B	21-MAY-04	JEG
O-XYLENE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
ACETONE	ug/L	< 10	10	EPA 8260B	21-MAY-04	JEG
2-BUTANONE	ug/L	< 10	10	EPA 8260B	21-MAY-04	JEG
CHLOROMETHANE	ug/L	< 10	10	EPA 8260B	21-MAY-04	JEG
CIS-1,3-DICHLOROPROPENE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
TRANS-1,3-DICHLOROPROPENE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG

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Invoice Number: 33446

Date Collected 18-MAY-04

Client ID: LGAC 2-3-5-18-04

Lab ID: L35741-2

PARAMETER	UNITS	RESULT	LIMIT OF QUANTITATION	TEST METHOD	TEST DATE	ANALYST
BROMOFORM	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
DIBROMOCHLOROMETHANE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
BROMODICHLOROMETHANE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
CARBON TETRACHLORIDE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
BROMOMETHANE	ug/L	< 10	10	EPA 8260B	21-MAY-04	JEG

Comments: <none>

Submitted by
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Reviewed and Approved by:

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Laboratory Manager

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Date Received. 19-MAY-04
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Invoice Number 33446

Date Collected 18-MAY-04

Client ID: OUTFALL 5-18-04

Lab ID: L35741-3

PARAMETER	UNITS	RESULT	LIMIT OF QUANTITATION	TEST METHOD	TEST DATE	ANALYST
SILVER-LOW LEVEL	mg/L	< .0003	0003	EPA 6020	27-MAY-04	JMS
ALUMINUM-LOW LEVEL	mg/L	.0313	.0005	EPA 6020	27-MAY-04	JMS
ARSENIC-LOW LEVEL	mg/L	.0314	.0003	EPA 6020	27-MAY-04	JMS
BERYLLIUM-LOW LEVEL	mg/L	< 0004	.0004	EPA 6020	27-MAY-04	JMS
BOD-5 DAY	mg/L	< 2	2	SM 5210	20-MAY-04	TGA
CADMIUM-LOW LEVEL	mg/L	< .0003	0003	EPA 6020	27-MAY-04	JMS
CYANIDE-FREE	mg/L	< 005	.005	EPA 335 4	25-MAY-04	JPB
COD	mg/L	10.8	10	EPA 410.4	21-MAY-04	STL
CHROMIUM-LOW LEVEL	mg/L	.000732	.0006	EPA 6020	27-MAY-04	JMS
COPPER-LOW LEVEL	mg/L	00153	.001	EPA 6020	27-MAY-04	JMS
IRON-LOW LEVEL	mg/L	1 01	.0005	EPA 6020	27-MAY-04	JMS
MERCURY	mg/L	< 0002	.0002	EPA 7470A	22-MAY-04	STL
PESTICIDE ANALYSIS						
KEPONE	ug/L	U .047	.047	SOP 6.2	24-JUN-04	CS
PHOTOMIREX	ug/L	U 007	.007	SOP 6.2	24-JUN-04	CS
MIREX	ug/L	U .002	.002	SOP 6.2	24-JUN-04	CS
AMMONIA	mg/L	.65	.1	EPA 350 1	25-MAY-04	STL
NICKEL-LOW LEVEL	mg/L	.0174	.0006	EPA 6020	27-MAY-04	JMS
OIL & GREASE	mg/L	< 6.6	6.6	EPA 1664A	28-MAY-04	STL

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Date Received: 19-MAY-04
Date Reported. 27-JUN-04

Invoice Number: 33446

Date Collected. 18-MAY-04

Client ID OUTFALL 5-18-04

Lab ID L35741-3

PARAMETER	UNITS	RESULT	LIMIT OF QUANTITATION	TEST METHOD	TEST DATE	ANALYST
LEAD-LOW LEVEL	mg/L	< .0003	0003	EPA 6020	27-MAY-04	JMS
PESTICIDE/PCB ANALYSIS						
GAMMA-BHC	ug/L	< 02	02	EPA 8081	17-JUN-04	KAB
PH	PH UNITS	7 04	0	EPA 150.1	01-JUN-04	JPB
ANTIMONY-LOW LEVEL	mg/L	< .0004	0004	EPA 6020	27-MAY-04	JMS
SEMI-VOLATILE ANALYSIS						
ANTHRACENE	ug/L	< 10	10	EPA 8270C	07-JUN-04	CP
BENZO(A)ANTHRACENE	ug/L	< 10	10	EPA 8270C	07-JUN-04	CP
BENZO(K)FLUORANTHENE	ug/L	< 10	10	EPA 8270C	07-JUN-04	CP
3,4-BENZOFLUORANTHENE	ug/L	< 10	10	EPA 8270C	07-JUN-04	CP
BENZO(B)FLUORANTHENE	ug/L	< 10	10	EPA 8270C	07-JUN-04	CP
BENZO(G,H,I)PERYLENE	ug/L	< 10	10	EPA 8270C	07-JUN-04	CP
BENZO(A)PYRENE	ug/L	< 10	10	EPA 8270C	07-JUN-04	CP
CHRYSENE	ug/L	< 10	10	EPA 8270C	07-JUN-04	CP
DIBENZ(A,H)ANTHRACENE	ug/L	< 10	10	EPA 8270C	07-JUN-04	CP
FLUORENE	ug/L	< 10	10	EPA 8270C	07-JUN-04	CP
INDENO(1,2,3-CD)PYRENE	ug/L	< 10	10	EPA 8270C	07-JUN-04	CP
NAPHTHALENE	ug/L	< 10	10	EPA 8270C	07-JUN-04	CP
PHENANTHRENE	ug/L	< 10	10	EPA 8270C	07-JUN-04	CP
PYRENE	ug/L	< 10	10	EPA 8270C	07-JUN-04	CP
PHENOL	ug/L	< 10	10	EPA 8270C	07-JUN-04	CP
4-METHYLPHENOL	ug/L	< 10	10	EPA 8270C	07-JUN-04	CP
1,3-DICHLOROBENZENE	ug/L	< 10	10	EPA 8270C	07-JUN-04	CP
1,4-DICHLOROBENZENE	ug/L	< 10	10	EPA 8270C	07-JUN-04	CP
1,2-DICHLOROBENZENE	ug/L	< 10	10	EPA 8270C	07-JUN-04	CP
DIMETHYL PHTHALATE	ug/L	< 10	10	EPA 8270C	07-JUN-04	CP
BUTYLBENZYL PHTHALATE	ug/L	< 10	10	EPA 8270C	07-JUN-04	CP
DI-N-BUTYL PHTHALATE	ug/L	< 10	10	EPA 8270C	07-JUN-04	CP
2-METHYLNAPHTHALENE	ug/L	< 10	10	EPA 8270C	07-JUN-04	CP
3,4-DICHLORONITROBENZENE	ug/L	< 10	10	EPA 8270C	07-JUN-04	CP
DIPHENYL SULFONE	ug/L	< 10	10	EPA 8270C	07-JUN-04	CP

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STATE COLLEGE , PA 16801
Account Number. 155

Contact. RAINER DOMALSKI

Date Received: 19-MAY-04
Date Reported 27-JUN-04

Invoice Number 33446

Date Collected 18-MAY-04

Client ID. OUTFALL 5-18-04

Lab ID: L35741-3

PARAMETER	UNITS	RESULT	LIMIT OF QUANTITATION	TEST METHOD	TEST DATE	ANALYST
TOTAL DISSOLVED SOLIDS	mg/L	461	10	EPA 160.1	24-MAY-04	STL
THALLIUM-LOW LEVEL	mg/L	000576	.0002	EPA 6020	27-MAY-04	JMS
TOTAL ORGANIC CARBON	mg/L	< 1	1	EPA 415.1	21-MAY-04	STL
TOTAL SUSPENDED SOLIDS	mg/L	< 4	4	EPA 160 2	24-MAY-04	STL
VOLATILE ANALYSIS						
VINYL CHLORIDE	ug/L	< 20	20	EPA 8260B	21-MAY-04	JEG
DICHLOROMETHANE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
1,1-DICHLOROETHENE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
CIS-1,2-DICHLOROETHENE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
TRANS-1,2-DICHLOROETHENE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
CHLOROFORM	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
1,2-DICHLOROETHANE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
1,1,1-TRICHLOROETHANE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
1,1,2,2-TETRACHLOROETHANE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
1,2-DICHLOROPROPANE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
TRICHLOROETHENE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
BENZENE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
TETRACHLOROETHENE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
TOLUENE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
CHLOROBENZENE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
ETHYLBENZENE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
M,P-XYLENE	ug/L	< 10	10	EPA 8260B	21-MAY-04	JEG
O-XYLENE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
ACETONE	ug/L	< 10	10	EPA 8260B	21-MAY-04	JEG
2-BUTANONE	ug/L	< 10	10	EPA 8260B	21-MAY-04	JEG
CHLOROMETHANE	ug/L	< 10	10	EPA 8260B	21-MAY-04	JEG
CIS-1,3-DICHLOROPROPENE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
TRANS-1,3-DICHLOROPROPENE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
BROMOFORM	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
DIBROMOCHLOROMETHANE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
BROMODICHLOROMETHANE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
CARBON TETRACHLORIDE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG

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Analytical Report

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201 STRUBLE ROAD
STATE COLLEGE , PA 16801
Account Number 155

Contact. RAINER DOMALSKI

Date Received: 19-MAY-04
Date Reported 27-JUN-04

Invoice Number 33446

Date Collected: 18-MAY-04

Client ID: OUTFALL 5-18-04

Lab ID: L35741-3

PARAMETER	UNITS	RESULT	LIMIT OF QUANTITATION	TEST METHOD	TEST DATE	ANALYST
BROMOMETHANE	ug/L	< 10	10	EPA 8260B	21-MAY-04	JEG
ZINC-LOW LEVEL	mg/L	.0427	.0005	EPA 6020	27-MAY-04	JMS

Comments: <none>

Submitted by
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Analytical Report

RUTGERS ORGANICS CORPORATION/EHS DEPT.
201 STRUBLE ROAD
STATE COLLEGE, PA 16801
ACCOUNT: 155

Date Received: 19-May-04
Date Reported: 1-Jun-04

Invoice Number: 33446

Contact RAINER DOMALSKI

Date Collected: 18-May-04

Client ID: AGAC-1-2-5-18-04

Lab ID: L35741-4

PARAMETER	UNITS	RESULT	LIMIT OF QUANTITATION	TEST METHOD	TEST DATE	ANALYST
VOLATILE ANALYSIS						
BROMODICHLOROMETHANE	ppb (v/v)	< 1.3	1.3	EPA-19 TO-14	27-May-04	STL
BROMOFORM	ppb (v/v)	< 1.3	1.3	EPA-19 TO-14	27-May-04	STL
DIBROMOCHLOROMETHANE	ppb (v/v)	< 1.3	1 3	EPA-19 TO-14	27-May-04	STL
DIBROMOMETHANE	ppb (v/v)	< 1.3	1.3	EPA-19 TO-14	27-May-04	STL
TRANS-1,2-DICHLOROETHANE	ppb (v/v)	< 1.3	1.3	EPA-19 TO-14	27-May-04	STL
CUMENE	ppb (v/v)	< 1.3	1.3	EPA-19 TO-14	27-May-04	STL
N-PROPYLBENZENE	ppb (v/v)	< 1.3	1.3	EPA-19 TO-14	27-May-04	STL
1,2,3-TRICHLOROPROPANE	ppb (v/v)	< 3.2	3.2	EPA-19 TO-14	27-May-04	STL
DICHLORODIFLUOROMETHANE	ppb (v/v)	< 2 0	2 0	EPA-19 TO-14	27-May-04	STL
VINYL CHLORIDE	ppb (v/v)	86	2.0	EPA-19 TO-14	27-May-04	STL
CHLOROETHANE	ppb (v/v)	< 2.0	2 0	EPA-19 TO-14	27-May-04	STL
TRICHLOROFLUOROMETHANE	ppb (v/v)	< 2.0	2 0	EPA-19 TO-14	27-May-04	STL
1,1-DICHLOROETHENE	ppb (v/v)	< 1 3	1.3	EPA-19 TO-14	27-May-04	STL
1,1-DICHLOROETHANE	ppb (v/v)	< 1.3	1 3	EPA-19 TO-14	27-May-04	STL
CIS-1,2-DICHLOROETHENE	ppb (v/v)	< 1 3	1.3	EPA-19 TO-14	27-May-04	STL
CHLOROFORM	ppb (v/v)	< 1 3	1.3	EPA-19 TO-14	27-May-04	STL
1,1,1-TRICHLOROETHANE	ppb (v/v)	< 1.3	1.3	EPA-19 TO-14	27-May-04	STL
CARBON TETRACHLORIDE	ppb (v/v)	< 1.3	1.3	EPA-19 TO-14	27-May-04	STL
BENZENE	ppb (v/v)	< 1.3	1.3	EPA-19 TO-14	27-May-04	STL
1,2-DICHLOROETHANE	ppb (v/v)	2.5	1.3	EPA-19 TO-14	27-May-04	STL
TRICHLOROETHENE	ppb (v/v)	< 1.3	1.3	EPA-19 TO-14	27-May-04	STL
1,2-DICHLOROPROPANE	ppb (v/v)	< 1 3	1.3	EPA-19 TO-14	27-May-04	STL
CIS-1,3-DICHLOROPROPENE	ppb (v/v)	< 1.3	1.3	EPA-19 TO-14	27-May-04	STL
TOLUENE	ppb (v/v)	< 1.3	1.3	EPA-19 TO-14	27-May-04	STL
TRANS-1,3-DICHLOROPROPENE	ppb (v/v)	< 1 3	1.3	EPA-19 TO-14	27-May-04	STL
1,1,2-TRICHLOROETHANE	ppb (v/v)	< 1 3	1.3	EPA-19 TO-14	27-May-04	STL
TETRACHLOROETHENE	ppb (v/v)	< 1 3	1.3	EPA-19 TO-14	27-May-04	STL
1,2-DIBROMOETHANE (EDB)	ppb (v/v)	< 1 3	1.3	EPA-19 TO-14	27-May-04	STL
CHLOROBENZENE	ppb (v/v)	< 1.3	1.3	EPA-19 TO-14	27-May-04	STL
ETHYLBENZENE	ppb (v/v)	< 1.3	1.3	EPA-19 TO-14	27-May-04	STL
M,P-XYLENE	ppb (v/v)	< 1 3	1.3	EPA-19 TO-14	27-May-04	STL
O-XYLENE	ppb (v/v)	< 1 3	1.3	EPA-19 TO-14	27-May-04	STL
STYRENE	ppb (v/v)	< 1 3	1 3	EPA-19 TO-14	27-May-04	STL

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Analytical Report

RUTGERS ORGANICS CORPORATION/EHS DEPT.
201 STRUBLE ROAD
STATE COLLEGE, PA 16801
ACCOUNT 155

Date Received 19-May-04
Date Reported 1-Jun-04

Invoice Number. 33446

Contact RAINER DOMALSKI

Date Collected: 18-May-04

Client ID AGAC-1-2-5-18-04

Lab ID: L35741-4

PARAMETER	UNITS	RESULT	LIMIT OF QUANTITATION	TEST METHOD	TEST DATE	ANALYST
1,1,2,2-TETRACHLOROETHANE	ppb (v/v)	< 1.3	1.3	EPA-19 TO-14	27-May-04	STL
1,3,5-TRIMETHYLBENZENE	ppb (v/v)	< 1.3	1.3	EPA-19 TO-14	27-May-04	STL
1,3-DICHLOROBENZENE	ppb (v/v)	< 1.3	1.3	EPA-19 TO-14	27-May-04	STL
1,4-DICHLOROBENZENE	ppb (v/v)	< 1.3	1.3	EPA-19 TO-14	27-May-04	STL
1,2-DICHLOROBENZENE	ppb (v/v)	3.6	1 3	EPA-19 TO-14	27-May-04	STL

Submitted by
Exygen Research
Reviewed and Approved by

Charles Simons
Laboratory Manager

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Date Received· 19-May-04
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Invoice Number: 33446

Contact. RAINER DOMALSKI

Date Collected· 18-May-04

Client ID: AGAC-1-2-5-18-04

Lab ID: L35741-4

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	UNITS	ESTIMATED RESULT	RETENTION TIME	TEST METHOD	TEST DATE	ANALYST
NONE				EPA-19 TO-14	27-May-04	STL

M Result was measured against nearest internal standard assuming a response factor of 1.

Submitted by
Exygen Research
Reviewed and Approved by:

Charles Simons
Laboratory Manager

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RUTGERS ORGANICS CORPORATION/EHS DEPT.
201 STRUBLE ROAD
STATE COLLEGE, PA 16801
ACCOUNT: 155

Contact: RAINER DOMALSKI

Date Received: 19-May-04
Date Reported 1-Jun-04

Invoice Number: 33446

Date Collected: 18-May-04

Client ID: AGAC-F-5-18-04

Lab ID: L35741-5

PARAMETER	UNITS	RESULT	LIMIT OF QUANTITATION	TEST METHOD	TEST DATE	ANALYST
VOLATILE ANALYSIS						
BROMODICHLOROMETHANE	ppb (v/v)	< 1.0	1.0	EPA-19 TO-14	27-May-04	STL
BROMOFORM	ppb (v/v)	< 1.0	1.0	EPA-19 TO-14	27-May-04	STL
DIBROMOCHLOROMETHANE	ppb (v/v)	< 1.0	1.0	EPA-19 TO-14	27-May-04	STL
DIBROMOMETHANE	ppb (v/v)	< 1.0	1 0	EPA-19 TO-14	27-May-04	STL
TRANS-1,2-DICHLOROETHANE	ppb (v/v)	< 1 0	1 0	EPA-19 TO-14	27-May-04	STL
CUMENE	ppb (v/v)	< 1 0	1 0	EPA-19 TO-14	27-May-04	STL
N-PROPYLBENZENE	ppb (v/v)	< 1 0	1 0	EPA-19 TO-14	27-May-04	STL
1,2,3-TRICHLOROPROPANE	ppb (v/v)	< 1 0	1 0	EPA-19 TO-14	27-May-04	STL
DICHLORODIFLUOROMETHANE	ppb (v/v)	< 2.0	2 0	EPA-19 TO-14	27-May-04	STL
VINYL CHLORIDE	ppb (v/v)	< 2.0	2.0	EPA-19 TO-14	27-May-04	STL
CHLOROETHANE	ppb (v/v)	< 2.0	2.0	EPA-19 TO-14	27-May-04	STL
TRICHLOROFLUOROMETHANE	ppb (v/v)	< 2.0	2 0	EPA-19 TO-14	27-May-04	STL
1,1-DICHLOROETHENE	ppb (v/v)	< 1.0	1.0	EPA-19 TO-14	27-May-04	STL
1,1-DICHLOROETHANE	ppb (v/v)	< 1.0	1.0	EPA-19 TO-14	27-May-04	STL
CIS-1,2-DICHLOROETHENE	ppb (v/v)	1.2	1.0	EPA-19 TO-14	27-May-04	STL
CHLOROFORM	ppb (v/v)	< 1.0	1.0	EPA-19 TO-14	27-May-04	STL
1,1,1-TRICHLOROETHANE	ppb (v/v)	< 1.0	1.0	EPA-19 TO-14	27-May-04	STL
CARBON TETRACHLORIDE	ppb (v/v)	< 1 0	1.0	EPA-19 TO-14	27-May-04	STL
BENZENE	ppb (v/v)	< 1.0	1.0	EPA-19 TO-14	27-May-04	STL
1,2-DICHLOROETHANE	ppb (v/v)	< 1.0	1.0	EPA-19 TO-14	27-May-04	STL
TRICHLOROETHENE	ppb (v/v)	< 1.0	1.0	EPA-19 TO-14	27-May-04	STL
1,2-DICHLOROPROPANE	ppb (v/v)	< 1.0	1.0	EPA-19 TO-14	27-May-04	STL
CIS-1,3-DICHLOROPROPENE	ppb (v/v)	< 1.0	1.0	EPA-19 TO-14	27-May-04	STL
TOLUENE	ppb (v/v)	7.6	1 0	EPA-19 TO-14	27-May-04	STL
TRANS-1,3-DICHLOROPROPENE	ppb (v/v)	< 1.0	1.0	EPA-19 TO-14	27-May-04	STL
1,1,2-TRICHLOROETHANE	ppb (v/v)	< 1.0	1 0	EPA-19 TO-14	27-May-04	STL
TETRACHLOROETHENE	ppb (v/v)	< 1.0	1.0	EPA-19 TO-14	27-May-04	STL
1,2-DIBROMOETHANE (EDB)	ppb (v/v)	< 1.0	1.0	EPA-19 TO-14	27-May-04	STL
CHLOROBENZENE	ppb (v/v)	< 1.0	1 0	EPA-19 TO-14	27-May-04	STL
ETHYLBENZENE	ppb (v/v)	3.3	1.0	EPA-19 TO-14	27-May-04	STL
M,P-XYLENE	ppb (v/v)	9.1	1.0	EPA-19 TO-14	27-May-04	STL
O-XYLENE	ppb (v/v)	1.9	1.0	EPA-19 TO-14	27-May-04	STL
STYRENE	ppb (v/v)	< 1.0	1.0	EPA-19 TO-14	27-May-04	STL

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RUTGERS ORGANICS CORPORATION/EHS DEPT.
201 STRUBLE ROAD
STATE COLLEGE, PA 16801
ACCOUNT 155

Date Received 19-May-04
Date Reported. 1-Jun-04

Invoice Number 33446

Contact RAINER DOMALSKI

Date Collected: 18-May-04

Client ID· AGAC-F-5-18-04

Lab ID: L35741-5

PARAMETER	UNITS	RESULT	LIMIT OF QUANTITATION	TEST METHOD	TEST DATE	ANALYST
1,1,2,2-TETRACHLOROETHANE	ppb (v/v)	< 1.0	1.0	EPA-19 TO-14	27-May-04	STL
1,3,5-TRIMETHYLBENZENE	ppb (v/v)	< 1.0	1.0	EPA-19 TO-14	27-May-04	STL
1,3-DICHLOROBENZENE	ppb (v/v)	< 1.0	1.0	EPA-19 TO-14	27-May-04	STL
1,4-DICHLOROBENZENE	ppb (v/v)	< 1.0	1.0	EPA-19 TO-14	27-May-04	STL
1,2-DICHLOROBENZENE	ppb (v/v)	2.6	1.0	EPA-19 TO-14	27-May-04	STL

Submitted by
Exygen Research
Reviewed and Approved by·

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Laboratory Manager

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RUTGERS ORGANICS CORPORATION/EHS DEPT
201 STRUBLE ROAD
STATE COLLEGE, PA 16801
ACCOUNT: 155

Date Received: 19-May-04
Date Reported: 1-Jun-04

Invoice Number: 33446

Contact: RAINER DOMALSKI

Date Collected: 18-May-04

Client ID: AGAC-F-5-18-04

Lab ID: L35741-5

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	UNITS	ESTIMATED RESULT		RETENTION TIME	TEST METHOD	TEST DATE	ANALYST
UNKNOWN	ppb (v/v)	2.1 NJ	M	4.3949	EPA-19 TO-14	27-May-04	STL
ETHANOL	ppb (v/v)	1.3 NJ	M	5.2987	EPA-19 TO-14	27-May-04	STL
UNKNOWN	ppb (v/v)	7 9 NJ	M	5.6053	EPA-19 TO-14	27-May-04	STL
UNKNOWN	ppb (v/v)	2 4 NJ	M	5.9819	EPA-19 TO-14	27-May-04	STL
UNKNOWN	ppb (v/v)	4.2 NJ	M	6.0949	EPA-19 TO-14	27-May-04	STL
UNKNOWN	ppb (v/v)	11 NJ	M	8 8922	EPA-19 TO-14	27-May-04	STL
UNKNOWN	ppb (v/v)	25 NJ	M	9 527	EPA-19 TO-14	27-May-04	STL
DECANE	ppb (v/v)	2.5 NJ	M	18.962	EPA-19 TO-14	27-May-04	STL
BENZENE, 1,2,4-TRIMETHYL-	ppb (v/v)	11 NJ	M	19.108	EPA-19 TO-14	27-May-04	STL
UNDECANE	ppb (v/v)	2.4 NJ	M	20 216	EPA-19 TO-14	27-May-04	STL
BENZENE, 1-METHYL-2-(METHYLE	ppb (v/v)	1 3 NJ	M	20 721	EPA-19 TO-14	27-May-04	STL
ACETIC ACID, 2-ETHYLHEXYL ESTE	ppb (v/v)	1 7 NJ	M	20.759	EPA-19 TO-14	27-May-04	STL

M: Result was measured against nearest internal standard assuming a response factor of 1.

Submitted by
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RUTGERS ORGANICS CORPORATION
201 STRUBLE ROAD
STATE COLLEGE , PA 16801
Account Number 155

Contact: RAINER DOMALSKI

Date Received 19-MAY-04
Date Reported. 27-JUN-04

Invoice Number: 33446

Date Collected. 13-MAY-04

Client ID: TRIP BLANK

Lab ID L35741-6

PARAMETER	UNITS	RESULT	LIMIT OF QUANTITATION	TEST METHOD	TEST DATE	ANALYST
VOLATILE ANALYSIS						
VINYL CHLORIDE	ug/L	< 20	20	EPA 8260B	21-MAY-04	JEG
DICHLOROMETHANE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
1,1-DICHLOROETHENE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
CIS-1,2-DICHLOROETHENE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
TRANS-1,2-DICHLOROETHENE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
CHLOROFORM	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
1,2-DICHLOROETHANE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
1,1,1-TRICHLOROETHANE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
1,1,2,2-TETRACHLOROETHANE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
1,2-DICHLOROPROPANE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
TRICHLOROETHENE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
BENZENE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
TETRACHLOROETHENE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
TOLUENE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
CHLOROBENZENE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
ETHYLBENZENE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
M,P-XYLENE	ug/L	< 10	10	EPA 8260B	21-MAY-04	JEG
O-XYLENE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
ACETONE	ug/L	< 10	10	EPA 8260B	21-MAY-04	JEG
2-BUTANONE	ug/L	< 10	10	EPA 8260B	21-MAY-04	JEG
CHLOROMETHANE	ug/L	< 10	10	EPA 8260B	21-MAY-04	JEG
CIS-1,3-DICHLOROPROPENE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
TRANS-1,3-DICHLOROPROPENE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
BROMOFORM	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
DIBROMOCHLOROMETHANE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
BROMODICHLOROMETHANE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
CARBON TETRACHLORIDE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
BROMOMETHANE	ug/L	< 10	10	EPA 8260B	21-MAY-04	JEG

Comments: <none>

Submitted by
Exygen Research
Reviewed and Approved by:

Charles Simons
Laboratory Manager

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NARRATIVE

Exygen Research (PADEP ID# 14-347)
Project: L35741

Sample Receipt:
Samples were received on May 19, 2004. The samples were received in two sample coolers at 0.9°C, and 1.7°C.

Sample Analysis:
There were no problems related to the analysis of these samples.

Holding Times:
Samples were analyzed within holding times.

Sub-contract Laboratories:
Todd Giddings and Associates of State College, PA (PADEP ID# 14-321) performed the BOD analysis on these samples.

Severn Trent Laboratories (STL) of Pittsburgh, PA (PADEP ID# 02-416) performed the COD, total organic carbon, total suspended solids, total dissolved solids, mercury, ammonia nitrogen, free cyanide, and oil and grease analysis.

Severn Trent Laboratories (STL) of Knoxville, TN (PADEP ID# 68-576) performed the GC/MS volatiles (air) analysis.

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Analytical Report

RUTGERS ORGANICS CORPORATION
201 STRUBLE ROAD
STATE COLLEGE , PA 16801
Account Number: 155

Contact: RAINER DOMALSKI

Date Received: 19-MAY-04
Date Reported: 27-JUN-04

Invoice Number: 33446

Date Collected. 18-MAY-04

Client ID: INFLUENT 5-18-04

Lab ID: L35741-1

PARAMETER	UNITS	RESULT	LIMIT OF QUANTITATION	TEST METHOD	TEST DATE	ANALYST
PESTICIDE ANALYSIS						
KEPONE	ug/L	U .042	.042	SOP 6.2	24-JUN-04	CS
PHOTOMIREX	ug/L	U .006	.006	SOP 6.2	24-JUN-04	CS
MIREX	ug/L	.13	.002	SOP 6.2	24-JUN-04	CS
PH	PH UNITS	6.46	0	EPA 150.1	01-JUN-04	JPB
TOTAL DISSOLVED SOLIDS	mg/L	589	10	EPA 160.1	24-MAY-04	STL
TOTAL SUSPENDED SOLIDS	mg/L	17.2	4	EPA 160.2	24-MAY-04	STL

Comments: <none>

Submitted by
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STATE COLLEGE , PA 16801
Account Number: 155

Contact: RAINER DOMALSKI

Date Received: 19-MAY-04
Date Reported: 27-JUN-04

Invoice Number: 33446

Date Collected: 18-MAY-04

Client ID: LGAC 2-3-5-18-04

Lab ID: L35741-2

PARAMETER	UNITS	RESULT	LIMIT OF QUANTITATION	TEST METHOD	TEST DATE	ANALYST
PESTICIDE ANALYSIS						
KEPONE	ug/L	U .042	.042	SOP 6.2	24-JUN-04	CS
PHOTOMIREX	ug/L	U .006	.006	SOP 6.2	24-JUN-04	CS
MIREX	ug/L	U .002	.002	SOP 6.2	24-JUN-04	CS
PH	PH UNITS	6.97	0	EPA 150.1	01-JUN-04	JPB
TOTAL DISSOLVED SOLIDS	mg/L	544	10	EPA 160.1	24-MAY-04	STL
TOTAL SUSPENDED SOLIDS	mg/L	< 4	4	EPA 160.2	24-MAY-04	STL
VOLATILE ANALYSIS						
VINYL CHLORIDE	ug/L	< 20	20	EPA 8260B	21-MAY-04	JEG
DICHLOROMETHANE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
1,1-DICHLOROETHENE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
CIS-1,2-DICHLOROETHENE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
TRANS-1,2-DICHLOROETHENE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
CHLOROFORM	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
1,2-DICHLOROETHANE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
1,1,1-TRICHLOROETHANE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
1,1,2,2-TETRACHLOROETHANE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
1,2-DICHLOROPROPANE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
TRICHLOROETHENE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
BENZENE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
TETRACHLOROETHENE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
TOLUENE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
CHLOROBENZENE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
ETHYLBENZENE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
M,P-XYLENE	ug/L	< 10	10	EPA 8260B	21-MAY-04	JEG
O-XYLENE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
ACETONE	ug/L	< 10	10	EPA 8260B	21-MAY-04	JEG
2-BUTANONE	ug/L	< 10	10	EPA 8260B	21-MAY-04	JEG
CHLOROMETHANE	ug/L	< 10	10	EPA 8260B	21-MAY-04	JEG
CIS-1,3-DICHLOROPROPENE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
TRANS-1,3-DICHLOROPROPENE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG

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Contact: RAINER DOMALSKI

Date Received: 19-MAY-04
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Invoice Number: 33446

Date Collected: 18-MAY-04

Client ID: LGAC 2-3-5-18-04

Lab ID: L35741-2

PARAMETER	UNITS	RESULT	LIMIT OF QUANTITATION	TEST METHOD	TEST DATE	ANALYST
BROMOFORM	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
DIBROMOCHLOROMETHANE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
BROMODICHLOROMETHANE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
CARBON TETRACHLORIDE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
BROMOMETHANE	ug/L	< 10	10	EPA 8260B	21-MAY-04	JEG

Comments: <none>

Submitted by
Exygen Research
Reviewed and Approved by:

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STATE COLLEGE , PA 16801
Account Number: 155

Contact: RAINER DOMALSKI

Date Received: 19-MAY-04
Date Reported: 27-JUN-04

Invoice Number: 33446

Date Collected: 18-MAY-04

Client ID: OUTFALL 5-18-04

Lab ID: L35741-3

PARAMETER	UNITS	RESULT	LIMIT OF QUANTITATION	TEST METHOD	TEST DATE	ANALYST
SILVER-LOW LEVEL	mg/L	< .0003	.0003	EPA 6020	27-MAY-04	JMS
ALUMINUM-LOW LEVEL	mg/L	.0313	.0005	EPA 6020	27-MAY-04	JMS
ARSENIC-LOW LEVEL	mg/L	.0314	.0003	EPA 6020	27-MAY-04	JMS
BERYLLIUM-LOW LEVEL	mg/L	< .0004	.0004	EPA 6020	27-MAY-04	JMS
BOD-5 DAY	mg/L	< 2	2	SM 5210	20-MAY-04	TGA
CADMIUM-LOW LEVEL	mg/L	< .0003	.0003	EPA 6020	27-MAY-04	JMS
CYANIDE-FREE	mg/L	< .005	.005	EPA 335.4	25-MAY-04	JPB
COD	mg/L	10.8	10	EPA 410.4	21-MAY-04	STL
CHROMIUM-LOW LEVEL	mg/L	.000732	.0006	EPA 6020	27-MAY-04	JMS
COPPER-LOW LEVEL	mg/L	.00153	.001	EPA 6020	27-MAY-04	JMS
IRON-LOW LEVEL	mg/L	1.01	.0005	EPA 6020	27-MAY-04	JMS
MERCURY	mg/L	< .0002	.0002	EPA 7470A	22-MAY-04	STL
PESTICIDE ANALYSIS						
KEPONE	ug/L	U .047	.047	SOP 6.2	24-JUN-04	CS
PHOTOMIREX	ug/L	U .007	.007	SOP 6.2	24-JUN-04	CS
MIREX	ug/L	U .002	.002	SOP 6.2	24-JUN-04	CS
AMMONIA	mg/L	.65	.1	EPA 350.1	25-MAY-04	STL
NICKEL-LOW LEVEL	mg/L	.0174	.0006	EPA 6020	27-MAY-04	JMS
OIL & GREASE	mg/L	< 6.6	6.6	EPA 1664A	28-MAY-04	STL

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Analytical Report

RUTGERS ORGANICS CORPORATION
201 STRUBLE ROAD
STATE COLLEGE , PA 16801
Account Number: 155

Contact. RAINER DOMALSKI

Date Received: 19-MAY-04
Date Reported: 27-JUN-04

Invoice Number: 33446

Date Collected: 18-MAY-04

Client ID: OUTFALL 5-18-04

Lab ID: L35741-3

PARAMETER	UNITS	RESULT	LIMIT OF QUANTITATION	TEST METHOD	TEST DATE	ANALYST
LEAD-LOW LEVEL	mg/L	< .0003	.0003	EPA 6020	27-MAY-04	JMS
PESTICIDE/PCB ANALYSIS						
GAMMA-BHC	ug/L	< .02	.02	EPA 8081	17-JUN-04	KAB
PH	PH UNITS	7.04	0	EPA 150.1	01-JUN-04	JPB
ANTIMONY-LOW LEVEL	mg/L	< .0004	.0004	EPA 6020	27-MAY-04	JMS
SEMI-VOLATILE ANALYSIS						
ANTHRACENE	ug/L	< 10	10	EPA 8270C	07-JUN-04	CP
BENZO(A)ANTHRACENE	ug/L	< 10	10	EPA 8270C	07-JUN-04	CP
BENZO(K)FLUORANTHENE	ug/L	< 10	10	EPA 8270C	07-JUN-04	CP
3,4-BENZOFLUORANTHENE	ug/L	< 10	10	EPA 8270C	07-JUN-04	CP
BENZO(B)FLUORANTHENE	ug/L	< 10	10	EPA 8270C	07-JUN-04	CP
BENZO(G,H,I)PERYLENE	ug/L	< 10	10	EPA 8270C	07-JUN-04	CP
BENZO(A)PYRENE	ug/L	< 10	10	EPA 8270C	07-JUN-04	CP
CHRYSENE	ug/L	< 10	10	EPA 8270C	07-JUN-04	CP
DIBENZ(A,H)ANTHRACENE	ug/L	< 10	10	EPA 8270C	07-JUN-04	CP
FLUORENE	ug/L	< 10	10	EPA 8270C	07-JUN-04	CP
INDENO(1,2,3-CD)PYRENE	ug/L	< 10	10	EPA 8270C	07-JUN-04	CP
NAPHTHALENE	ug/L	< 10	10	EPA 8270C	07-JUN-04	CP
PHENANTHRENE	ug/L	< 10	10	EPA 8270C	07-JUN-04	CP
PYRENE	ug/L	< 10	10	EPA 8270C	07-JUN-04	CP
PHENOL	ug/L	< 10	10	EPA 8270C	07-JUN-04	CP
4-METHYLPHENOL	ug/L	< 10	10	EPA 8270C	07-JUN-04	CP
1,3-DICHLOROBENZENE	ug/L	< 10	10	EPA 8270C	07-JUN-04	CP
1,4-DICHLOROBENZENE	ug/L	< 10	10	EPA 8270C	07-JUN-04	CP
1,2-DICHLOROBENZENE	ug/L	< 10	10	EPA 8270C	07-JUN-04	CP
DIMETHYL PHTHALATE	ug/L	< 10	10	EPA 8270C	07-JUN-04	CP
BUTYLBENZYL PHTHALATE	ug/L	< 10	10	EPA 8270C	07-JUN-04	CP
DI-N-BUTYL PHTHALATE	ug/L	< 10	10	EPA 8270C	07-JUN-04	CP
2-METHYLNAPHTHALENE	ug/L	< 10	10	EPA 8270C	07-JUN-04	CP
3,4-DICHLORONITROBENZENE	ug/L	< 10	10	EPA 8270C	07-JUN-04	CP
DIPHENYL SULFONE	ug/L	< 10	10	EPA 8270C	07-JUN-04	CP

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Lab ID: L35741-3

PARAMETER	UNITS	RESULT	LIMIT OF QUANTITATION	TEST METHOD	TEST DATE	ANALYST
TOTAL DISSOLVED SOLIDS	mg/L	461	10	EPA 160.1	24-MAY-04	STL
THALLIUM-LOW LEVEL	mg/L	.000576	.0002	EPA 6020	27-MAY-04	JMS
TOTAL ORGANIC CARBON	mg/L	< 1	1	EPA 415.1	21-MAY-04	STL
TOTAL SUSPENDED SOLIDS	mg/L	< 4	4	EPA 160.2	24-MAY-04	STL
VOLATILE ANALYSIS						
VINYL CHLORIDE	ug/L	< 20	20	EPA 8260B	21-MAY-04	JEG
DICHLOROMETHANE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
1,1-DICHLOROETHENE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
CIS-1,2-DICHLOROETHENE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
TRANS-1,2-DICHLOROETHENE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
CHLOROFORM	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
1,2-DICHLOROETHANE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
1,1,1-TRICHLOROETHANE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
1,1,2,2-TETRACHLOROETHANE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
1,2-DICHLOROPROPANE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
TRICHLOROETHENE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
BENZENE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
TETRACHLOROETHENE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
TOLUENE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
CHLOROBENZENE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
ETHYLBENZENE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
M,P-XYLENE	ug/L	< 10	10	EPA 8260B	21-MAY-04	JEG
O-XYLENE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
ACETONE	ug/L	< 10	10	EPA 8260B	21-MAY-04	JEG
2-BUTANONE	ug/L	< 10	10	EPA 8260B	21-MAY-04	JEG
CHLOROMETHANE	ug/L	< 10	10	EPA 8260B	21-MAY-04	JEG
CIS-1,3-DICHLOROPROPENE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
TRANS-1,3-DICHLOROPROPENE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
BROMOFORM	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
DIBROMOCHLOROMETHANE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
BROMODICHLOROMETHANE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
CARBON TETRACHLORIDE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG

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Invoice Number: 33446

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Client ID: OUTFALL 5-18-04

Lab ID: L35741-3

PARAMETER	UNITS	RESULT	LIMIT OF QUANTITATION	TEST METHOD	TEST DATE	ANALYST
BROMOMETHANE	ug/L	< 10	10	EPA 8260B	21-MAY-04	JEG
ZINC-LOW LEVEL	mg/L	.0427	.0005	EPA 6020	27-MAY-04	JMS

Comments: <none>

Submitted by
Exygen Research
Reviewed and Approved by:

Charles Simons
Laboratory Manag

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STATE COLLEGE, PA 16801
ACCOUNT: 155

Date Received: 19-May-04
Date Reported: 1-Jun-04

Invoice Number: 33446

Contact: RAINER DOMALSKI

Date Collected: 18-May-04

Client ID: AGAC-1-2-5-18-04

Lab ID: L35741-4

PARAMETER	UNITS	RESULT	LIMIT OF QUANTITATION	TEST METHOD	TEST DATE	ANALYST
VOLATILE ANALYSIS						
BROMODICHLOROMETHANE	ppb (v/v)	< 1.3	1.3	EPA-19 TO-14	27-May-04	STL
BROMOFORM	ppb (v/v)	< 1.3	1.3	EPA-19 TO-14	27-May-04	STL
DIBROMOCHLOROMETHANE	ppb (v/v)	< 1.3	1.3	EPA-19 TO-14	27-May-04	STL
DIBROMOMETHANE	ppb (v/v)	< 1.3	1.3	EPA-19 TO-14	27-May-04	STL
TRANS-1,2-DICHLOROETHANE	ppb (v/v)	< 1.3	1.3	EPA-19 TO-14	27-May-04	STL
CUMENE	ppb (v/v)	< 1.3	1.3	EPA-19 TO-14	27-May-04	STL
N-PROPYLBENZENE	ppb (v/v)	< 1.3	1.3	EPA-19 TO-14	27-May-04	STL
1,2,3-TRICHLOROPROPANE	ppb (v/v)	< 3.2	3.2	EPA-19 TO-14	27-May-04	STL
DICHLORODIFLUOROMETHANE	ppb (v/v)	< 2.0	2.0	EPA-19 TO-14	27-May-04	STL
VINYL CHLORIDE	ppb (v/v)	86	2.0	EPA-19 TO-14	27-May-04	STL
CHLOROETHANE	ppb (v/v)	< 2.0	2.0	EPA-19 TO-14	27-May-04	STL
TRICHLOROFLUOROMETHANE	ppb (v/v)	< 2.0	2.0	EPA-19 TO-14	27-May-04	STL
1,1-DICHLOROETHENE	ppb (v/v)	< 1.3	1.3	EPA-19 TO-14	27-May-04	STL
1,1-DICHLOROETHANE	ppb (v/v)	< 1.3	1.3	EPA-19 TO-14	27-May-04	STL
CIS-1,2-DICHLOROETHENE	ppb (v/v)	< 1.3	1.3	EPA-19 TO-14	27-May-04	STL
CHLOROFORM	ppb (v/v)	< 1.3	1.3	EPA-19 TO-14	27-May-04	STL
1,1,1-TRICHLOROETHANE	ppb (v/v)	< 1.3	1.3	EPA-19 TO-14	27-May-04	STL
CARBON TETRACHLORIDE	ppb (v/v)	< 1.3	1.3	EPA-19 TO-14	27-May-04	STL
BENZENE	ppb (v/v)	< 1.3	1.3	EPA-19 TO-14	27-May-04	STL
1,2-DICHLOROETHANE	ppb (v/v)	2.5	1.3	EPA-19 TO-14	27-May-04	STL
TRICHLOROETHENE	ppb (v/v)	< 1.3	1.3	EPA-19 TO-14	27-May-04	STL
1,2-DICHLOROPROPANE	ppb (v/v)	< 1.3	1.3	EPA-19 TO-14	27-May-04	STL
CIS-1,3-DICHLOROPROPENE	ppb (v/v)	< 1.3	1.3	EPA-19 TO-14	27-May-04	STL
TOLUENE	ppb (v/v)	< 1.3	1.3	EPA-19 TO-14	27-May-04	STL
TRANS-1,3-DICHLOROPROPENE	ppb (v/v)	< 1.3	1.3	EPA-19 TO-14	27-May-04	STL
1,1,2-TRICHLOROETHANE	ppb (v/v)	< 1.3	1.3	EPA-19 TO-14	27-May-04	STL
TETRACHLOROETHENE	ppb (v/v)	< 1.3	1.3	EPA-19 TO-14	27-May-04	STL
1,2-DIBROMOETHANE (EDB)	ppb (v/v)	< 1.3	1.3	EPA-19 TO-14	27-May-04	STL
CHLOROBENZENE	ppb (v/v)	< 1.3	1.3	EPA-19 TO-14	27-May-04	STL
ETHYLBENZENE	ppb (v/v)	< 1.3	1.3	EPA-19 TO-14	27-May-04	STL
M,P-XYLENE	ppb (v/v)	< 1.3	1.3	EPA-19 TO-14	27-May-04	STL
O-XYLENE	ppb (v/v)	< 1.3	1.3	EPA-19 TO-14	27-May-04	STL
STYRENE	ppb (v/v)	< 1.3	1.3	EPA-19 TO-14	27-May-04	STL

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Analytical Report

RUTGERS ORGANICS CORPORATION/EHS DEPT.
201 STRUBLE ROAD
STATE COLLEGE, PA 16801
ACCOUNT: 155

Date Received: 19-May-04
Date Reported: 1-Jun-04

Invoice Number: 33446

Contact: RAINER DOMALSKI

Date Collected: 18-May-04

Client ID: AGAC-1-2-5-18-04

Lab ID: L35741-4

PARAMETER	UNITS	RESULT	LIMIT OF QUANTITATION	TEST METHOD	TEST DATE	ANALYST
1,1,2,2-TETRACHLOROETHANE	ppb (v/v)	< 1.3	1.3	EPA-19 TO-14	27-May-04	STL
1,3,5-TRIMETHYLBENZENE	ppb (v/v)	< 1.3	1.3	EPA-19 TO-14	27-May-04	STL
1,3-DICHLOROBENZENE	ppb (v/v)	< 1.3	1.3	EPA-19 TO-14	27-May-04	STL
1,4-DICHLOROBENZENE	ppb (v/v)	< 1.3	1.3	EPA-19 TO-14	27-May-04	STL
1,2-DICHLOROBENZENE	ppb (v/v)	3.6	1.3	EPA-19 TO-14	27-May-04	STL

Submitted by
Exygen Research
Reviewed and Approved by:

Charles Simons
Laboratory Manager

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Lab ID: L35741-4

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	UNITS	ESTIMATED RESULT	RETENTION TIME	TEST METHOD	TEST DATE	ANALYST
NONE				EPA-19 TO-14	27-May-04	STL

M: Result was measured against nearest internal standard assuming a response factor of 1.

Submitted by
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Laboratory Manager

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Date Collected: 18-May-04

Client ID: AGAC-F-5-18-04

Lab ID: L35741-5

PARAMETER	UNITS	RESULT	LIMIT OF QUANTITATION	TEST METHOD	TEST DATE	ANALYST
VOLATILE ANALYSIS						
BROMODICHLOROMETHANE	ppb (v/v)	< 1.0	1.0	EPA-19 TO-14	27-May-04	STL
BROMOFORM	ppb (v/v)	< 1.0	1.0	EPA-19 TO-14	27-May-04	STL
DIBROMOCHLOROMETHANE	ppb (v/v)	< 1.0	1.0	EPA-19 TO-14	27-May-04	STL
DIBROMOMETHANE	ppb (v/v)	< 1.0	1.0	EPA-19 TO-14	27-May-04	STL
TRANS-1,2-DICHLOROETHANE	ppb (v/v)	< 1.0	1.0	EPA-19 TO-14	27-May-04	STL
CUMENE	ppb (v/v)	< 1.0	1.0	EPA-19 TO-14	27-May-04	STL
N-PROPYLBENZENE	ppb (v/v)	< 1.0	1.0	EPA-19 TO-14	27-May-04	STL
1,2,3-TRICHLOROPROPANE	ppb (v/v)	< 1.0	1.0	EPA-19 TO-14	27-May-04	STL
DICHLORODIFLUOROMETHANE	ppb (v/v)	< 2.0	2.0	EPA-19 TO-14	27-May-04	STL
VINYL CHLORIDE	ppb (v/v)	< 2.0	2.0	EPA-19 TO-14	27-May-04	STL
CHLOROETHANE	ppb (v/v)	< 2.0	2.0	EPA-19 TO-14	27-May-04	STL
TRICHLOROFLUOROMETHANE	ppb (v/v)	< 2.0	2.0	EPA-19 TO-14	27-May-04	STL
1,1-DICHLOROETHENE	ppb (v/v)	< 1.0	1.0	EPA-19 TO-14	27-May-04	STL
1,1-DICHLOROETHANE	ppb (v/v)	< 1.0	1.0	EPA-19 TO-14	27-May-04	STL
CIS-1,2-DICHLOROETHENE	ppb (v/v)	1.2	1.0	EPA-19 TO-14	27-May-04	STL
CHLOROFORM	ppb (v/v)	< 1.0	1.0	EPA-19 TO-14	27-May-04	STL
1,1,1-TRICHLOROETHANE	ppb (v/v)	< 1.0	1.0	EPA-19 TO-14	27-May-04	STL
CARBON TETRACHLORIDE	ppb (v/v)	< 1.0	1.0	EPA-19 TO-14	27-May-04	STL
BENZENE	ppb (v/v)	< 1.0	1.0	EPA-19 TO-14	27-May-04	STL
1,2-DICHLOROETHANE	ppb (v/v)	< 1.0	1.0	EPA-19 TO-14	27-May-04	STL
TRICHLOROETHENE	ppb (v/v)	< 1.0	1.0	EPA-19 TO-14	27-May-04	STL
1,2-DICHLOROPROPANE	ppb (v/v)	< 1.0	1.0	EPA-19 TO-14	27-May-04	STL
CIS-1,3-DICHLOROPROPENE	ppb (v/v)	< 1.0	1.0	EPA-19 TO-14	27-May-04	STL
TOLUENE	ppb (v/v)	7.6	1.0	EPA-19 TO-14	27-May-04	STL
TRANS-1,3-DICHLOROPROPENE	ppb (v/v)	< 1.0	1.0	EPA-19 TO-14	27-May-04	STL
1,1,2-TRICHLOROETHANE	ppb (v/v)	< 1.0	1.0	EPA-19 TO-14	27-May-04	STL
TETRACHLOROETHENE	ppb (v/v)	< 1.0	1.0	EPA-19 TO-14	27-May-04	STL
1,2-DIBROMOETHANE (EDB)	ppb (v/v)	< 1.0	1.0	EPA-19 TO-14	27-May-04	STL
CHLOROBENZENE	ppb (v/v)	< 1.0	1.0	EPA-19 TO-14	27-May-04	STL
ETHYLBENZENE	ppb (v/v)	3.3	1.0	EPA-19 TO-14	27-May-04	STL
M,P-XYLENE	ppb (v/v)	9.1	1.0	EPA-19 TO-14	27-May-04	STL
O-XYLENE	ppb (v/v)	1.9	1.0	EPA-19 TO-14	27-May-04	STL
STYRENE	ppb (v/v)	< 1.0	1.0	EPA-19 TO-14	27-May-04	STL

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Client ID: AGAC-F-5-18-04

Lab ID: L35741-5

PARAMETER	UNITS	RESULT	LIMIT OF QUANTITATION	TEST METHOD	TEST DATE	ANALYST
1,1,2,2-TETRACHLOROETHANE	ppb (v/v)	< 1.0	1.0	EPA-19 TO-14	27-May-04	STL
1,3,5-TRIMETHYLBENZENE	ppb (v/v)	< 1.0	1.0	EPA-19 TO-14	27-May-04	STL
1,3-DICHLOROBENZENE	ppb (v/v)	< 1.0	1.0	EPA-19 TO-14	27-May-04	STL
1,4-DICHLOROBENZENE	ppb (v/v)	< 1.0	1.0	EPA-19 TO-14	27-May-04	STL
1,2-DICHLOROBENZENE	ppb (v/v)	2.6	1.0	EPA-19 TO-14	27-May-04	STL

Submitted by
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Reviewed and Approved by:

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Laboratory Manager

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Lab ID: L35741-5

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	UNITS	ESTIMATED RESULT		RETENTION TIME	TEST METHOD	TEST DATE	ANALYST
UNKNOWN	ppb (v/v)	2.1 NJ	M	4.3949	EPA-19 TO-14	27-May-04	STL
ETHANOL	ppb (v/v)	1.3 NJ	M	5.2987	EPA-19 TO-14	27-May-04	STL
UNKNOWN	ppb (v/v)	7.9 NJ	M	5.6053	EPA-19 TO-14	27-May-04	STL
UNKNOWN	ppb (v/v)	2.4 NJ	M	5.9819	EPA-19 TO-14	27-May-04	STL
UNKNOWN	ppb (v/v)	4.2 NJ	M	6.0949	EPA-19 TO-14	27-May-04	STL
UNKNOWN	ppb (v/v)	11 NJ	M	8.8922	EPA-19 TO-14	27-May-04	STL
UNKNOWN	ppb (v/v)	25 NJ	M	9.527	EPA-19 TO-14	27-May-04	STL
DECANE	ppb (v/v)	2.5 NJ	M	18.962	EPA-19 TO-14	27-May-04	STL
BENZENE, 1,2,4-TRIMETHYL-	ppb (v/v)	11 NJ	M	19.108	EPA-19 TO-14	27-May-04	STL
UNDECANE	ppb (v/v)	2.4 NJ	M	20.216	EPA-19 TO-14	27-May-04	STL
BENZENE, 1-METHYL-2-(METHYLE	ppb (v/v)	1.3 NJ	M	20.721	EPA-19 TO-14	27-May-04	STL
ACETIC ACID, 2-ETHYLHEXYL ESTE	ppb (v/v)	1.7 NJ	M	20.759	EPA-19 TO-14	27-May-04	STL

M: Result was measured against nearest internal standard assuming a response factor of 1.

Submitted by
Exygen Research
Reviewed and Approved by:

Charles Simons
Laboratory Manager

3058 Research Drive
State College, PA 16801, USA
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Analytical Report

RUTGERS ORGANICS CORPORATION
201 STRUBLE ROAD
STATE COLLEGE , PA 16801
Account Number: 155

Contact: RAINER DOMALSKI

Date Received: 19-MAY-04
Date Reported: 27-JUN-04

Invoice Number: 33446

Date Collected: 13-MAY-04

Client ID: TRIP BLANK

Lab ID: L35741-6

PARAMETER	UNITS	RESULT	LIMIT OF QUANTITATION	TEST METHOD	TEST DATE	ANALYST
VOLATILE ANALYSIS						
VINYL CHLORIDE	ug/L	< 20	20	EPA 8260B	21-MAY-04	JEG
DICHLOROMETHANE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
1,1-DICHLOROETHENE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
CIS-1,2-DICHLOROETHENE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
TRANS-1,2-DICHLOROETHENE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
CHLOROFORM	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
1,2-DICHLOROETHANE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
1,1,1-TRICHLOROETHANE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
1,1,2,2-TETRACHLOROETHANE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
1,2-DICHLOROPROPANE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
TRICHLOROETHENE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
BENZENE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
TETRACHLOROETHENE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
TOLUENE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
CHLOROBENZENE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
ETHYLBENZENE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
M,P-XYLENE	ug/L	< 10	10	EPA 8260B	21-MAY-04	JEG
O-XYLENE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
ACETONE	ug/L	< 10	10	EPA 8260B	21-MAY-04	JEG
2-BUTANONE	ug/L	< 10	10	EPA 8260B	21-MAY-04	JEG
CHLOROMETHANE	ug/L	< 10	10	EPA 8260B	21-MAY-04	JEG
CIS-1,3-DICHLOROPROPENE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
TRANS-1,3-DICHLOROPROPENE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
BROMOFORM	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
DIBROMOCHLOROMETHANE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
BROMODICHLOROMETHANE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
CARBON TETRACHLORIDE	ug/L	< 5	5	EPA 8260B	21-MAY-04	JEG
BROMOMETHANE	ug/L	< 10	10	EPA 8260B	21-MAY-04	JEG

Comments: <none>

Submitted by
Exygen Research
Reviewed and Approved by:

Charles Simons
Laboratory Manag

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NARRATIVE

Exygen Research (PADEP ID# 14-347)
Project: L35741

Sample Receipt:
Samples were received on May 19, 2004. The samples were received in two sample coolers at 0.9°C, and 1.7°C.

Sample Analysis:
There were no problems related to the analysis of these samples.

Holding Times:
Samples were analyzed within holding times.

Sub-contract Laboratories:
Todd Giddings and Associates of State College, PA (PADEP ID# 14-321) performed the BOD analysis on these samples.

Severn Trent Laboratories (STL) of Pittsburgh, PA (PADEP ID# 02-416) performed the COD, total organic carbon, total suspended solids, total dissolved solids, mercury, ammonia nitrogen, free cyanide, and oil and grease analysis.

Severn Trent Laboratories (STL) of Knoxville, TN (PADEP ID# 68-576) performed the GC/MS volatiles (air) analysis.

ATTACHMENT 3

WATER/AIR SAMPLING RESULTS – JUNE 2, 2004
NEASE CHEMICAL SITE, SALEM, OHIO

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Analytical Report

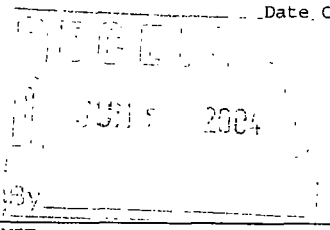
RUTGERS ORGANICS CORPORATION
201 STRUBLE ROAD
STATE COLLEGE , PA 16801
Account Number: 155

Contact: RAINER DOMALSKI

Date Received: 03-JUN-04
Date Reported 20-JUN-04

Invoice Number: 33446

Date Collected. 02-JUN-04



Client ID. INFLUENT 6-2-04

Lab ID: L35758-1

PARAMETER	UNITS	RESULT	LIMIT OF QUANTITATION	TEST METHOD	TEST DATE	ANALYST
AMMONIA	mg/L	95	1	EPA 350 1	18-JUN-04	STL
NITRATE+NITRITE	mg/L	< .1	.1	EPA 353.2	10-JUN-04	STL
PHOSPHORUS	mg/L	< 1	1	EPA 365 2	16-JUN-04	STL

Comments: <none>

Submitted by
Exygen Research
Reviewed and Approved by.

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Laboratory Manager

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Analytical Report

RUTGERS ORGANICS CORPORATION
201 STRUBLE ROAD
STATE COLLEGE , PA 16801
Account Number: 155

Contact: RAINER DOMALSKI

Date Received 03-JUN-04
Date Reported: 20-JUN-04

Invoice Number 33446

Date Collected: 02-JUN-04

Client ID: OUTFALL 6-2-04

Lab ID: L35758-2

PARAMETER	UNITS	RESULT	LIMIT OF QUANTITATION	TEST METHOD	TEST DATE	ANALYST
AMMONIA	mg/L	1.1	.1	EPA 350 1	18-JUN-04	STL
NITRATE+NITRITE	mg/L	< .1	1	EPA 353.2	10-JUN-04	STL
PHOSPHORUS	mg/L	19	1	EPA 365 2	16-JUN-04	STL

Comments: <none>

Submitted by
Exygen Research
Reviewed and Approved by

Charles Simons
Laboratory Manager

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NARRATIVE

Exygen Research (PADEP ID# 14-347)
Project: L35758

Sample Receipt:
Samples were received on June 17, 2004. The samples were received in one sample cooler at 2.0°C.

Sample Analysis:
There were no problems related to the analysis of these samples.

Holding Times:
The samples were analyzed within holding time.

Sub-contract Laboratories:
Severn Trent Laboratories (STL) of Pittsburgh, PA (PADEP ID# 02-416) performed the ammonia nitrogen analysis on these samples. Severn Trent Laboratories (STL) of North Canton, OH (PADEP ID# 68-340) performed the phosphorus analysis on these samples.

ATTACHMENT 4

RESULTS OF TWO ACUTE TOXICITYY EVALUATION
FINAL EFFLUENT
MAY 18 THROUGH MAY 22, 2004

RESULTS OF TWO ACUTE TOXICITY EVALUATIONS OF RUTGERS ORGANICS CORPORATION, SALEM SITE LAGOON WATER TREATMENT PLANT FINAL EFFLUENT

AAT JOB # 51 - 01 – 69

May 18 – May 22 2004

Report Prepared for:

Rutgers Organics Corporation
201 Struble Road
State College, Pennsylvania 16801

Report Prepared by:

AMERICAN AQUATIC TESTING, INC.
890 NORTH GRAHAM STREET
ALLENTOWN, PENNSYLVANIA 18109

INTRODUCTION

A set of two static acute toxicity tests were conducted with larval fathead minnows, *Pimephales promelas* (*P. promelas*) and the freshwater cladoceran, *Ceriodaphnia dubia* (*C dubia*) to determine the relative toxicity of final effluent from the Rutgers Organics Corporation Lagoon Water Treatment Plant, Salem, Ohio. The 96-hour static fathead acute toxicity test and the 48-hour static *C dubia* acute toxicity tests were conducted from May 18 to May 22 2004. The toxicity evaluations were conducted by American Aquatic Testing, Inc., Allentown, Pennsylvania.

All tests were performed according to procedures outlined in Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms, 4th Edition (EPA/600/4-90/027F) and Reporting and Testing Guidance for Biomonitoring Required by the Ohio Environmental Protection Agency, October 1991.

MATERIALS

TEST ORGANSIMS Fathead Minnow, *Pimephales promelas*

Larval fathead minnows used in acute testing were obtained from in-house cultures maintained by ABS,Inc.. Test age organisms are maintained in shallow depth basins containing 10L of moderately hard reconstituted water and are fed newly hatched *Artemia* (brine shrimp) nauplii twice a day up until test initiation. The test organisms were 02 days old at test initiation No acclimation of these test organisms was required as they were raised in moderately hard reconstituted water, which was used for testing.

Freshwater Cladoceran, *Ceriodaphnia dubia*

Cladoceran neonates, *C. dubia* were obtained from AAT, Inc.'s in-house cultures. Cultures for generating test age (<24 hours old) neonates are maintained as single cultures in 30 mL soufflé cups containing 15 mL of moderately hard reconstituted water. These adults are transferred daily into fresh culture water and are fed a combination of a unicellular green alga (*Selenastrum capricornutum*) and a yeast/Cerophyll/trout chow (YCT) suspension. Broods released during a five hour period were pooled and used to initiate the acute toxicity test No acclimation of these test organisms was required as they were raised in moderately hard reconstituted water, which was used for testing Neonates were released between 0800 and 1300 of May 18, 2004

DILUTION WATER

Moderately hard reconstituted water was prepared in accordance to procedures outlined in EPA/600/4-90/027F and was used as dilution/control water for the toxicity tests. Deionized water (Specialty Filtration Products) and reagent grade chemicals were used to achieve the following concentrations: 96 mg/L of $NaHCO_3$, 60.0 mg/L of $MgSO_4$ and 4.0 mg/L of KCl and 60.0mg/L of $CaSO_4$ $2H_2O$.

TEST MATERIAL

The material tested was final effluent collected by Howells and Baird personnel with a grab sampler placed at the outfall. One grab sample was collected for each of the two acute toxicity tests. The sample, collected May 17, 2004, was shipped overnight to AAT, Inc. in a cooler containing ice and was used to initiate testing on May 18, 2004. A Chain-of-Custody accompanied the sample. Tests were initiated prior to the expiration of the 36-hour holding time.

METHODS

P. promelas larvae (02 day old) were exposed to the effluent sample for 96 hours under static, non-renewal conditions. Test organisms were exposed in groups of 10 in 1 L glass beakers containing 500 mL of test solution with two replicates per concentration (20 organisms per concentration) The test organisms were fed prior to test initiation and at 48 hours.

C. dubia neonates (<24 hours old) were exposed to the effluent sample for 48 hours under static non-renewal conditions. Test organisms were exposed in groups of five in 30 mL soufflé cups containing 15 mL of test solution with four replicates per concentration (20 organisms per concentration). The test organisms were not fed during the test exposure.

Both sets of test chambers were placed in randomized positions in a temperature controlled environment maintained at 25 $\pm$ 1 $^{\circ}$ C. The highest concentration used for exposure was 100 %. A 0 56 dilution schedule was used to prepare sample concentrations of 56%, 32%, 18% and 10%, by volume A control sample consisting of 100 % dilution water was also tested.

Surviving test organisms were counted daily. Dead test organisms and debris were removed daily at this time. Temperature was measured daily in a surrogate replicate placed alongside the test chambers. Dissolved oxygen, pH and conductivity were measured in one replicate chamber at each concentration at the beginning and end of the test exposure. Alkalinity and hardness were measured in the control and the 100% concentration at the beginning of the test exposure. The lighting regime was 16 hours light, 08 hours dark.

RESULTS

FATHEAD MINNOW 96-HOUR ACUTE TEST RESULTS

As a result of less than 50 % mortality in any test concentration during the exposure period the acute data was evaluated visually. Therefore, the 96-hour LC_{50} is > 100%. This result yields an Acute Toxic Unit; TUa (100%/LC_{50}) of 1.0.

CERIODAPHNIA DUBIA 48-HOUR ACUTE TEST RESULTS

As a result of less than 50 % mortality in any test concentration during the exposure period the acute data was evaluated visually Therefore, the 48-hour LC_{50} is > 100%. This result yields an Acute Toxic Unit; TUa (100%/LC_{50}) of 1.0.

Table I. Fathead Minnow Mortality Data

CLIENT: Rutgers Organics Corp., Salem Lagoon Water Treatment Plant
TEST: 96-hour Definitive Acute Toxicity Test
DATE: 18 – 22 May 2004

Sample Type	% Effluent	# of Organisms	Cumulative number of organisms affected at 24 hr	48 hr	72 hr	96 hr	% Mortality*
Final Effluent	0	20	0	0	0	0	0
	10	20	0	0	0	0	0
	18	20	0	0	0	0	0
	32	20	1	1	1	1	5
	56	20	1	1	2	2	10
	100	20	0	0	1	1	5

* Cumulative Percent Mortality at 96 hours

Table II. Fathead Minnow Physical/Chemical Measurements

CLIENT: Rutgers Organics Corp., Salem Lagoon Water Treatment Plant
TEST: 96-hour Definitive Acute Toxicity Test
DATE: 18 – 22 May 2004

	% Effluent by Volume					
Time	0	10	18	32	56	100
0 hour						
Conduct μmhos	285	349	382	448	598	820
D.O. ppm	8.3	8.0	7.8	7.6	7.1	5.6
Temp. °C A	25.5	25.5	25.5	25.5	25.5	25.5
B	25.5	25.5	25.5	25.5	25.5	25.5
pH Std .units	7.8	7.8	7.7	7.6	7.4	7.3
Alkalinity mg/L	70					200
Hardness mg/L	80					370
24 hours A	26.0	26.0	26.0	26.0	26.0	26.0
Temp. °C B	26.0	26.0	26.0	26 0	26.0	26.0
48 hours A	25.0	25 0	25.0	25.0	25.0	25.0
Temp. °C B	25.0	25.0	25.0	25.0	25.0	25.0
72 hours A	26.0	26.0	26.0	26.0	26.0	26.0
Temp. °C B	26.0	26.0	26.0	26.0	26.0	26.0
96 hours						
Conduct. μmhos	299	360	396	463	608	810
D.O. ppm	7.0	7.0	7.0	7.1	7.0	6.8
pH Std .units	7.9	7.9	8.0	8.1	8.3	8.3
Temp. °C A	25.5	25.5	25.5	25.5	25.5	25.5
B	25.5	25.5	25.5	25.5	25.5	25.5

Table I. *Ceriodaphnia dubia* Mortality Data

CLIENT: Rutgers Organics Corp., Salem Lagoon Water Treatment Plant
TEST: 48 hour Definitive Acute Toxicity Test
DATE: 18-20 May 2004

Sample Type	% Effluent	# of Organisms	Cumulative number of organism affected at 24 hours	48 hours	% Mortality*
Final Effluent	0	20	0	0	0
	10	20	0	0	0
	18	20	0	1	5
	32	20	0	0	0
	56	20	0	0	0
	100	20	1	1	5

* Cumulative Percent Mortality at 48 hours

Table II. *Ceriodaphnia dubia* Physical/Chemical Measurements

CLIENT: Rutgers Organics Corp., Salem Lagoon Water Treatment Plant
TEST: 48 hour Definitive Acute Toxicity Test
DATE: 18-20 May 2004

Time	% Effluent by Volume 0	10	18	32	56	100
0 hour						
Conduct. µmhos	290	340	380	450	595	825
D.O. ppm	7.9	7.5	7.4	7.3	6.6	5.5
Temp. °C	25.5	25.5	25.5	25.5	25.5	25.0
pH Std .units	7.8	7.7	7.6	7.6	7.4	7.2
Alkalinity mg/L	70					200
Hardness mg/L	80					370
24 hours						
Temp. °C	25.5	25.5	25.5	25.5	25.5	25.5
48 hours						
Conduct. µmhos	317	373	397	476	610	772
D.O. ppm	8.2	8.2	8.2	8.2	8.2	8.2
pH Std .units	8.0	8.1	8.1	8.2	8.3	8.3
Temp. °C	25.0	25.0	25.0	25.0	25.0	25.0

APPENDIX I

RAW DATA

18 May – 22 May

RESULTS OF TWO ACUTE TOXICITY EVALUATIONS OF
RUTGERS ORGANICS CORPORATION,
SALEM SITE LAGOON WATER TREATMENT PLANT
FINAL EFFLUENT

Freshwater Acute Test

American Aquatic Testing, Inc.

Job #: 51-01-69 Start Date/Time: 5-18-04 1530

Species: ~~P. promelas~~ C. dubia End Date/Time: 5-20-04 1600

Dilution Water: EPA Mod. Hard Test Type: 48hr. SNR

Conc. %	Temperature (C) 0 hr.	24 hr.	48 hr.
Control	25.5	25.5	25.0
10	25.5	25.5	25.0
18	25.5	25.5	25.0
32	25.5	25.5	25.0
56	25.5	25.5	25.0
100	25.0	25.5	25.0
Conc. %	**pH (Stand units) 0 hr.**		**48 hr.**
Control	7.8		8.0
10	7.7		8.1
18	7.6		8.1
32	7.6		8.2
56	7.4		8.3
100	7.2		8.3
Conc.	**Dissolved Oxygen (mg/L)**		
Control	7.9		8.2
10	7.5		8.2
18	7.4		8.2
32	7.3		8.2
56	6.6		8.2
100	5.5		8.2
Conc.	**Conductivity (umhos)**		
Control	290		317
10	340		373
18	380		397
32	450		476
56	595		610
100	825		772
Initials	JF	JF	JF
Date	5/18	5/19	5/20

Conc.	Alkalinity	Hardness
Control	70	80
100%	200	370
Initials	JF	JF
Date	5/18	5/18

Conc. %	Rep.	Live Count 0 hr.	24 hr.	48 hr.
Control	A	5	5	5
	B	5	5	5
	C	5	5	5
	D	5	5	5
10	A	5	5	5
	B	5	5	5
	C	5	5	5
	D	5	5	5
18	A	5	5	5
	B	5	5	4
	C	5	5	5
	D	5	5	5
32	A	5	5	5
	B	5	5	5
	C	5	5	5
	D	5	5	5
56	A	5	5	5
	B	5	5	5
	C	5	5	5
	D	5	5	5
100	A	5	5	5
	B	5	5	5
	C	5	4	4
	D	5	5	5
Initials		JF	JF	JF
Date		5/18	5/19	5/20

Observations:

Freshwater Acute Test

American Aquatic Testing, Inc.

Job #: 51-01-69

Species: P. promelas

Dilution Water: EPA Mod. Hard

Start Date/Time: 5-18-04 1640

End Date/Time: 5-22-04 1600

Test Type: 96hr. SNR Screen

Concentration	Rep.	Live Count					Temperature (C)				
		0 hr.	24 hr.	48 hr.	72 hr.	96 hr.	0 hr.	24 hr.	48 hr.	72 hr.	96 hr.
Control	A	10	10	10	10	10	25.5	26.0	25.0	26.0	25.5
	B	10	10	10	10	10	25.5	26.0	25.0	26.0	25.5
10%	A	10	10	10	10	10	25.5	26.0	25.0	26.0	25.5
	B	10	10	10	10	10	25.5	26.0	25.0	26.0	25.5
18%	A	10	10	10	10	10	25.5	26.0	25.0	26.0	25.5
	B	10	10	10	10	10	25.5	26.0	25.0	26.0	25.5
32%	A	10	9	9	9	9	25.5	26.0	25.0	26.0	25.5
	B	10	10	10	10	10	25.5	26.0	25.0	26.0	25.5
56%	A	10	9	9	9	9	25.5	26.0	25.0	26.0	25.5
	B	10	10	10	9	9	25.5	26.0	25.0	26.0	25.5
100%	A	10	10	10	9	9	25.5	26.0	25.0	26.0	25.5
	B	10	10	10	10	10	25.5	26.0	25.0	26.0	25.5
Initials		JF	JF	JF	JF	MP	JF	JF	JF	JF	MP
Date		5-18	5-19	5-20	5-21	5-22	5-18	5-19	5-20	5-21	5-22

Concentration	pH		D.O. (mg/L)		Cond. (umhos)	
	0 hr.	96 hr.	0 hr.	96 hr.	0 hr.	96 hr.
Control	7.8	7.9	8.3	7.0	285	299
10%	7.8	7.9	8.0	7.0	~~340~~	360
18%	7.7	8.0	7.8	7.0	382	396
32%	7.6	8.1	7.6	7.1	448	463
56%	7.4	8.3	7.1	7.0	598	608
100%	7.3	8.3	5.6	6.8	820	810
Initials	JF	MP	JF	MP	JF	MP
Date	5-18	5-22	5-18	5-22	5-18	5-22

Concentration	Alkalinity (mg/L)	Hardness (mg/L)
Control	70	80
100%	200	370
Initials	JF	JF
Date	5-18	5-18

Observations: ① 349 JF 5-18

AMERICAN AQUATIC TESTING, INC.

CHAIN OF CUSTODY

890 North Graham St.
ALLENTOWN, PA 18109
610 434 9015

Job #: 51-01-69

Client: Ruetgers Organics Client Contact: Dennis Lange

Address: Salem, Ohio

Phone #: (330) 332-4834

Sample Disposal: **Return to client** [ ] **Lab disposal** [X]

	Initial Chemistry Upon Arrival @ Laboratory						SAMPLE INFORMATION					Toxicity Testing Requested			
Sample #	Temp °C	Dis. O_2	pH	Alk. mg/L	Hard. mg/L	Cl- mg/L	Sample Identification	Sample Type C = Comp G=Grab	Sample Volume	Sample Date	Sample Time	Acute	Chronic	Sediment	Other
01	4.0	3.7	7.3	200	370	0.01	OUTFALL 5-17-04	Grab	2½ gal	5-17-04	1400		X		

Samples were:

1 Collected by AAT personnel [ ]
Client personnel [X]

2. Transported on ice? Yes [ ] No [ ]

3. Received with in holding time? Yes [X] No [ ]

4. Sample matrix is: Liquid [X] Sediment [ ] Soil [ ] Other [ ]

CUSTODY INFORMATION									Lab Use
Sample #	Relinquished by:	Received by:	Date	Time	Relinquished by:	Received for Lab:	Date	Time	ISTN#
0	D.L.L.	Fedex	5-17-04	1500		C. Nally	05/18/04	0905	04317

Special Instructions:

Will ammonia be analyzed on these samples? Yes No

Will additional parameters be analyzed on these samples? Yes No

APPENDIX II

OHIO EPA NPDES BIOMONITORING REPORT FORM

Date Created: 04/13/98
Last Revised: 04/13/98

OHIO EPA NPDES BIOMONITORING REPORT FORM

GENERAL INFORMATION

1. Facility Name: Rutgers Organics Corporation
   Reporting Date: 06 June 2004

2. Address: 1224 Benton Road
   Salem, Ohio 44460

3. Ohio EPA Permit Number: Substantive Discharge Criteria 4. Application (NPDES) No.
5. Facility Contact: Ralph Pearce 6. Phone No.: (800) 458-3434
7. Consultant/Testing Lab Name: American Aquatic testing, Inc.

8. Consultant/Lab Contact: Chris Nally 9. Phone No.: (610) 434-9015
10. Receiving Water(s) of Discharge: Unnamed Tributary of the Middle Fork of Middle Creek.

11. Outfall(s) Tested: 05/17/04 001

    Average Daily Flows:
    on Day Sampled (gal/day)

12. Is your current Standard Operating Procedure (SOP) Manual on file with Ohio EPA? (Yes/No) No If yes, date submitted: _____. If no, an SOP that follows Ohio EPA and/or U.S. EPA protocols must be submitted as soon as possible in order to eliminate the need to include this information with every report.

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Tarmo Pallop
Signature

6-11-04
Date

Tarmo Pallop, Vice - President

ACUTE TOXICITY TEST SAMPLING DATA

TABLE

Sampling Summary for Acute Toxicity Tests

Sampling Location & Description	Sample Collection Beginning MM/DD/Time	Ending MM/DD/Time	Weather/Receiving Stream Conditions
	05/17/04 1400	N/A	
Final Effluent:			
Outfall No.: 001			
Type (Grab/Composite): Grab			
Volume Collected: 1.0-gallon			
Upstream Station:	N/A		
Waterbody:			
Station No.:			
Type (Grab/Composite):			
Volume Collected:			
Downstream Station (Near-field):	N/A		
Waterbody:			
Station No.:			
Type (Grab/Composite):			
Volume Collected:			
Additional Stations (If needed):	N/A		
Waterbody:			
Station No.:			
Type (Grab/Composite):			
Volume Collected:			
Waterbody:			
Station No.:			
Type (Grab/Composite):			
Volume Collected:			

TOXICITY TEST CONDITIONS

TABLE

Summary of Toxicity Test Conditions	
1. Test Species and Age:	*Pimephales promelas* - 02 days old
2. Test Type and Duration:	96-hour Static Acute
3. Test Dates:	18 - 22 May 2004
4. Test Temperature (°C):	25.0°C ± 1.0°C
5. Light Quality:	50-100 ft. candles
6. Photoperiod:	16 hours light / 8 hours dark
7. Feeding Regime:	None
8. Size of Test Vessel:	1000 mL
9. Volume and Depth of Test Solutions:	500 mL / 92 mm
10. No. of Test Organisms per Test Vessel:	Ten
11. No. of Test Vessels per Test Solution:	Two
12. Total No. of Test Organisms per Test Solution:	20
13. Test Concentrations (as percent by volume effluent):	0, 10, 18, 32, 56, and 100%
14. Renewal of Test Solutions:	None
15. Dilution and Primary Control Water:	Moderately Hard Reconstituted Water
16. Secondary Control Water:	N/A
17. Aeration? Before/During Test:	None
18. Endpoints Measured:	LC_{50} and TU_a
19. If secondary control water used as diluent due to toxicity in primary control water, indicate number of consecutive tests conducted with alternative diluent:	N/A

ACUTE TOXICITY TEST RESULTS

TABLE

Results of a *Pimephales* (genus) *promelas* (species) 96-Hour Static Acute Toxicity Test
Conducted 05/18/04 (mm/dd/yy) - 05/22/04 (mm/dd/yy) Using Effluent from Outfall 001 (number).

Test Solutions	Cumulative Percent Mortality (Cumulative Percent Affected)[a] 24-Hr	48-Hr	72-Hr	96-Hr	LC_{50} Values (EC_{50} Values) 24-Hr	48-Hr	72-Hr	96-Hr
Primary Control/ Dilution Water	0	0	0	0	>100%	>100%	>100%	>100%
	(0)	(0)	(0)	(0)	(N/A)	(N/A)	(N/A)	(N/A)
Secondary Control	N/A				LC_{50} 95% Confidence Limits (EC_{50} 95% Confidence Limits)			
	( )	( )	( )	( )	24-Hr	48-Hr	72-Hr	96-Hr
10 % Effluent	0	0	0	0				
	(0)	(0)	(0)	(0)	LL N/A	N/A	N/A	N/A
18 % Effluent	0	0	0	0	UL N/A	N/A	N/A	N/A
	(0)	(0)	(0)	(0)				
32 % Effluent	1	1	1	1	LL (N/A)	( )	( )	( )
	(5)	(5)	(5)	(5)	UL (N/A)	( )	( )	( )
56 % Effluent	1	1	2	2 .	LL = Lower Limit UL = Upper Limit			
	(5)	(5)	(10)	(10)				
100 % Effluent	0	0	1	1	Calculated TU_a Value: 1.0			
	(0)	(0)	(5)	(5)				
Near-Field Sample	N/A				Method(s) Used to Determine LC_{50}, EC_{50}, and Confidence Limit Values:			
	( )	( )	( )	( )	Visual Inspection			

[a]-cumulative percent affected is the total percentage of test organisms observed dead, immotile, exhibiting loss of equilibrium, or other defined endpoints (specify below):
_____.

TOXICITY TEST CONDITIONS

TABLE

Summary of Toxicity Test Conditions	
1. Test Species and Age:	*Ceriodaphnia dubia* - <24-hours old
2. Test Type and Duration:	48-hour Static Acute
3. Test Dates:	18 - 20 May 2004
4. Test Temperature (°C):	25.0°C ± 1°C
5. Light Quality:	50-100 ft candles
6. Photoperiod:	16 hours light / 8 hours dark
7. Feeding Regime:	None
8. Size of Test Vessel:	30 mL
9. Volume and Depth of Test Solutions:	25 mL / 25 mm
10. No. of Test Organisms per Test Vessel:	Five
11. No. of Test Vessels per Test Solution:	Four
12. Total No. of Test Organisms per Test Solution:	20
13. Test Concentrations (as percent by volume effluent):	0, 10, 18, 32, 56, and 100%
14. Renewal of Test Solutions:	None
15. Dilution and Primary Control Water:	Moderately Hard Reconstituted Water
16. Secondary Control Water:	N/A
17. Aeration? Before/During Test:	None
18. Endpoints Measured:	LC_{50} and TU_a
19. If secondary control water used as diluent due to toxicity in primary control water, indicate number of consecutive tests conducted with alternative diluent:	N/A

ACUTE TOXICITY TEST RESULTS

TABLE

Results of a *Ceriodaphnia* (genus) *dubia* (species) 48-Hour Static Acute Toxicity Test
Conducted 05/18/04 (mm/dd/yy) - 05/20/04 (mm/dd/yy) Using Effluent from Outfall 001 (number).

Test Solutions	Cumulative Percent Mortality (Cumulative Percent Affected)[a]				LC_{50} Values (EC_{50} Values)			
	24-Hr	48-Hr	72-Hr	96-Hr	24-Hr	48-Hr	72-Hr	96-Hr
Primary Control/ Dilution Water	0	0			>100%	>100%		
	(0)	(0)	(___)	(___)	(N/A)	(N/A)	(___)	(___)
Secondary Control	N/A				LC_{50} 95% Confidence Limits (EC_{50} 95% Confidence Limits)			
	(___)	(___)	(___)	(___)	24-Hr	48-Hr	72-Hr	96-Hr
10 % Effluent	0	0						
	(0)	(0)	(___)	(___)	LL N/A	N/A		
18 % Effluent	0	1			UL N/A	N/A		
	(0)	(5)	(___)	(___)				
32 % Effluent	0	0			LL (N/A)	(N/A)	(___)	(___)
	(0)	(0)	(___)	(___)	UL (N/A)	(N/A)	(___)	(___)
56 % Effluent	0	0			LL = Lower Limit UL = Upper Limit			
	(0)	(0)	(___)	(___)				
100 % Effluent	1	1			Calculated TU_a Value: 1.0			
	(5)	(5)	(___)	(___)				
Near-Field Sample	N/A				Method(s) Used to Determine LC_{50}, EC_{50}, and Confidence Limit Values: Visual Inspection			
	(___)	(___)	(___)	(___)				

[a]-cumulative percent affected is the total percentage of test organisms observed dead, immotile, exhibiting loss of equilibrium, or other defined endpoints (specify below):
_____.